

27th Indian Convention of Food Scientists & Technologists (ICFoST)



“Raising Agro-processing & Integrating Novel technologies for
Boosting Organic Wellness (RAINBOW)”

Date: 18th - 20th December, 2019

Venue – Tezpur University, Tezpur, Assam



AFSTI
Empowering the Food Professional

Instructions for submission of Poster Abstracts

Rules for poster presentation

- Only registered delegates will be allowed to submit & present paper at the conference.
- A registered delegate can present **only one paper**.
- Original research work on any field of food science and technology can be presented. The researchers are requested to submit the abstract (250 words maximum).
- **Review papers are not accepted for presentation.**
- Abstract should be submitted along with DD/Cheque/Online transfer transaction ID towards payment of Registration fee.
- Abstracts pertaining to the subject matter of Food Science & Technology and 27th ICFoST are considered for acceptance.
- Abstracts will be evaluated and subjected to editorial corrections on acceptance.
- **Last date for receipt of abstract is 31-10-2019.**
- Abstracts received after last date **will not be printed** in the souvenir

Poster presentation correspondence

- Poster abstracts should be submitted by Online only. Poster submission web link www.icfost.org/ / https://icfost19.corbel.biz/abstract_login
- Acceptance of the abstract will be communicated to the e-mail ID through which it is submitted.

Poster Presentation Format

- Abstract should be composed using **MS word 97-2003**.
- Please use **Times New Roman** font: 14 pt bold for title, 12 pt bold for presenting author and 10pt normal for rest of the text.
- Affiliation of the authors should be given in normal font just below the names of the authors.
- The text of the abstract (Objective, Methodology and Result and Conclusions) should not exceed 200 words.
- Abstract should include introduction, objectives, methods, results, discussion & conclusion. Biological names of organisms and colloquial names should be italicized. References need not be included in the text. A model abstract is provided below.

Poster Presentation

Pin board size of 4 (Width) x 3 (Length) feet will be available for display of poster.

Date and time of presentation and abstract number can be found in the printed souvenir/registration area of conference

Model Abstract

Pectin/silver nanocomposite film to develop active packaging materials for food packaging applications: preparation, characterization and antibacterial property.

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Objective: Simple and direct method of producing pectin based antimicrobial nanocomposite films using pectin and silver nitrate.

Methodology: Pectin nanocomposite films were prepared by reducing different concentration of silver nitrate (2-10%) by pectin resulted in varied silver nano-sized particle distribution in nanocomposite films. The Pectin nanocomposite was further characterized using scanning electronic microscope (SEM), X-ray diffraction (XRD), UTM (Mechanical strength) and also studied barrier properties like water vapor transmission rate (WVTR) & oxygen transmission rate (OTR).

Results and Conclusions: Pectin nanocomposite films showed addition of silver nitrate did not alter the mechanical strength, but significantly changed OTR and WVTR values for 4 and 6% addition of silver nitrate concentrations. SEM micrographs showed tetragonal silver nanoparticles formation in the nanocomposite films with uniform distribution. The XRD pattern indicated the change in the crystal lattice of the films due to presence of silver nanoparticles. Antibacterial studies showed effective inhibition zones around nanocomposite films compared to plane pectin films against foodborne pathogens viz. *Escherichia coli*, *Staphylococcus aureus* and *Pseudomonas aeruginosa*. Pectin/silver nanocomposite films can be used as an active packaging system in food applications.

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