cross and parallel streaking methods against ten human and fish pathogens, viz., *Klebsiella pneumoniae*, Enterohaemorrhagic *Escherichia coli, Escherichia coli, Staphylococcus aureus* ATCC 12598, *Salmonella* Typhi, *Vibrio cholerae*, *Bacillus pumilus,* β-haemolytic *Streptococcus* sp., *Aeromonas caviae* and *Edwardsiella tarda.*The antibacterial activities of the crude ethyl acetate extract of whole cell of *P. aeruginosa* and the spent medium were also tested against the pathogens by well and disc diffusion assays. The ethyl acetate extract of *P. aeruginosa* cells was subjected to column chromatography packed with silica gel (60-120 mm mesh size) using petroleum ether and ethyl acetate in different concentrations as mobile phase. The compounds of the bioactive fractions were semi-purified and partially characterised using thin layer chromatography and mass spectroscopy. The secondary metabolites were identified to be pyrols, quinoline and phenazine compounds. The results suggested that the bioactive fractions of whole *P. aeruginosa* cells have potential antibacterial activity, which can be used as an alternative to conventional antibiotics to control fish and human pathogens.

AW 07

Chilled storage stability of spice marinated and high pressure processed Indian white prawns (*Fenneropenaeus indicus*)

GINSON JOSEPH*, C.K. KAMALAKANTH, J. BINDU, K.K. ASHA

ICAR-Central Institute of Fisheries Technology, Kochi, Kerala, India;*jinsonjosephif@gmail.com*

Chilled storage stability of marinated and high pressure treated peeled and undeveined fresh prawns were evaluated. The prawns were marinated with condiments *viz*. chilli powder, salt and turmeric and then vacuum packed in EVOH pouches and subjected to high pressure treatment of 200, 250 and 300 MPa for 5 min. Marinated unpressurized prawn samples were kept as control. The products were subsequently stored at 2±1°C for evaluating the shelf life and analysed periodically for biochemical, microbiological and organoleptic parameters. High pressure treatment significantly altered the quality indices such as pH, TVB-N, FFA, TBA, TPC and overall acceptability of the samples. The control and 200 MPa treated sample were rejected on 20th and 25th day of storage respectively, whereas 250 MPa and 300 MPa treated samples achieved a shelf life of 35 days during chilled storage. Among the samples, the samples treated at 250 MPa were found to be organoleptically superior and also with respect to its biochemical and microbiological quality parameters.

AW 08

Optimization of extraction of dietary fibre from *Ulva lactuca* and its application in fish sausage

JESMI DEBBARMA[1]*, P. VIJI[1], B. MADHUSUDANA RAO[1], C.G. JOSHY[2], L.N. MURTHY[3], C.N. RAVISHANKAR[2]

[1]ICAR-Central Institute of Fisheries Technology, Visakhapatnam Research Centre, Visakhapatnam, Andhra Pradesh, India; [2]ICAR- Central Institute of Fisheries Technology, Matsyapuri, Kochi, Kerala, India; [3]ICAR- Central Institute of Fisheries Technology, Mumbai Research Centre, Navi Mumbai, Maharashtra; **jessmi.cife@gmail.com*

This study was conducted to optimize extraction conditions of dietary fibre from *Ulva lactuca* and to evaluate its functional properties. Response surface methodology (RSM) was adopted following Box-Behnken design to determine the optimal conditions of