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## **Active NanoBioComposites of Interest in Food Packaging Applications**

*Jose M. LAGARON*

Novel Materials and Nanotechnology Group, IATA, CSIC, Apdo. Correos 73, 46100 Burjassot, Spain. E-mail: lagaron@iata.csic.es

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The present talk outlines recent results carried out within our research group in which active natural nanoadditives provide different simultaneous functionalities such as gas and vapour barrier, antimicrobial and oxygen scavenging properties to bioplastics. Bioplastics are generally perceived as materials with insufficient properties to replace petroleum-based plastics in many packaging applications and hence nanostructuring and/or reinforcement of these with natural fillers is a valid route to generally enhance their performance. The current talk will present strategies that develop active nanoclays to reinforce bioplastics with interest in food packaging applications.