


Brief CV

Name	Md. Wasikur Rahman	中文名		
Gender	Male	Title (Pro./Dr.)	Dr.	
Position (President...)	Chairman	Country	Bangladesh	
University/ Department	Jashore University of Science and Technology, Bangladesh Chemical Engineering			
Personal Website	https://just.edu.bd/t/teacher-1553500357306			
Research Area	Polymer synthesis, Composites, Nanocatalysis, Clean energy, Hydrogen storage, Water treatment, Waste management, etc.			

Brief introduction of your research experience:

Dr. Md. Wasikur Rahman received his B.Sc. in Chemical Engineering and Polymer Science from Shahjalal University of Science and Technology, Bangladesh in 2003. He obtained his Ph.D. in Chemical Sciences from Università di Torino (UNITO), Italy in 2010. He has experience in teaching, research and administration. He is currently serving as Associate Professor and Chairman at the Department of Chemical Engineering of Jashore University of Science and Technology, Bangladesh since February 2017. Prior to this, he joined in the university as Lecturer in 2011 and then promoted to Assistant professor in 2012. He launched his professional career as Assistant Engineer in Bangladesh Chemical Industries Corporation in 2005.

Dr. Rahman has fourteen (14) years of research and teaching experience in Italy, Malaysia and Bangladesh. He served in the Faculty of Chemical and Natural Resources Engineering of Universiti Malaysia Pahang (UMP) as Postdoctoral fellow in 2014-2015. During his fellowship at UMP and UNITO, he actively participated in various research projects as guidance of PhD and graduate students. Currently he is supervising eleven (11) research students of different academic levels and supervised around thirty (30) students in the past. At present he has accomplished research expertise in natural and synthetic polymers, hydrogen storage technology; nanomaterials development, characterization and their potential applications in separation processes related to energy, water treatment and waste management towards smart and cleaner environment. He has received research grants from the Ministry of Science and Technology, University Grants Commission, internal allocation from the university of the country.

Dr. Rahman has authored/co-authored of more than thirty (30) papers in peer reviewed journals and forty (40) proceeding papers. He delivered keynote speeches in India in International Conference on Advanced

Material Technologies (ICAMT)- 2016 and International Conference on Materials, Alloys and Experimental Mechanics (ICMAEM)- 2017. He has presented his research work at various national and international conferences and exhibitions (Italy, Spain, Norway, Slovenia, Singapore, Malaysia and India) and received recognition in the form of awards, medals and appreciations. He acquired Silver award in the competition of CITREX- 2015 (Creation, Innovation, Technology & Research Exposition) at UMP.

Dr. Rahman has served as an invited reviewer for a number of international journals including Composites Part B, Chinese Journal of Polymer Science, Journal of Biophotonics, Radiation Effects and Defects in Solids, AIChE Journal, Desalination and Water Treatment, International Journal of Polymer Analysis and Characterization, etc. In total, he has reviewed more than twenty (20) manuscripts from the journals mentioned above. He is a member of Institution of Engineers, Bangladesh (IEB).

报告题目及摘要/ Title & Abstract *

报告题目/Title Breakthrough in preparation of biodegradable polymeric films towards practical application

摘要/ Abstract The present work is an attempt to prepare biodegradable polymeric films of natural rubber, gelatin and alginates tailored by adding acrylic monomers, plasticizers and γ irradiation towards practical application. The role of urea, transition and divalent metals (Fe, Mn, Cu and Mg) on the physico-mechanical properties of radiation vulcanized natural rubber latex films was investigated. The properties of gelatin–polyvinyl alcohol blend films were improved by methyl methacrylate (MA) and 2-hydroxyethyl methacrylate monomers. Sodium alginate-based poly(ethylene oxide) films were prepared and modified by MA, glycerol and oil. The films were prepared by casting method and found that the properties of the films are strongly dependent on the film-forming parameters. The tensile properties, Young’s modulus, moisture content, water vapor permeability and structural properties of the blended films were determined. The thermal properties of the films were characterized by thermogravimetric analysis, dynamic mechanical analysis and differential scanning calorimetry. The structural and morphological features of the films were examined by Fourier transform infrared spectroscopy and scanning electron microscopy, respectively. The respective applications of the films were proposed to be dye degradation, first aid treatment, food packaging and surface coatings.