



MODIFIED BAZALT WITH COMPLETED POLYVINYLCHLORIDE COMPOSITION X-ray ANALYSIS RESULTS CLASSIFICATION

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Abstract

Structure, physical-mechanical, technological properties of plasticized and non-plasticized polymer materials based on PVC composition filled with modified basalt. Several methods and relevant information on the obtained results have been described in previously published scientific articles on detection.

Key words: basalt , modification , PVC , extrusion , casting under pressure , pressing , X-ray .

It should also be noted that based on the final experimental results obtained, it was also concluded that it is possible to process PVC-based composites filled with modified basalt by extrusion, pressure casting, calendaring, pressing and other methods to produce various products for technical purposes.

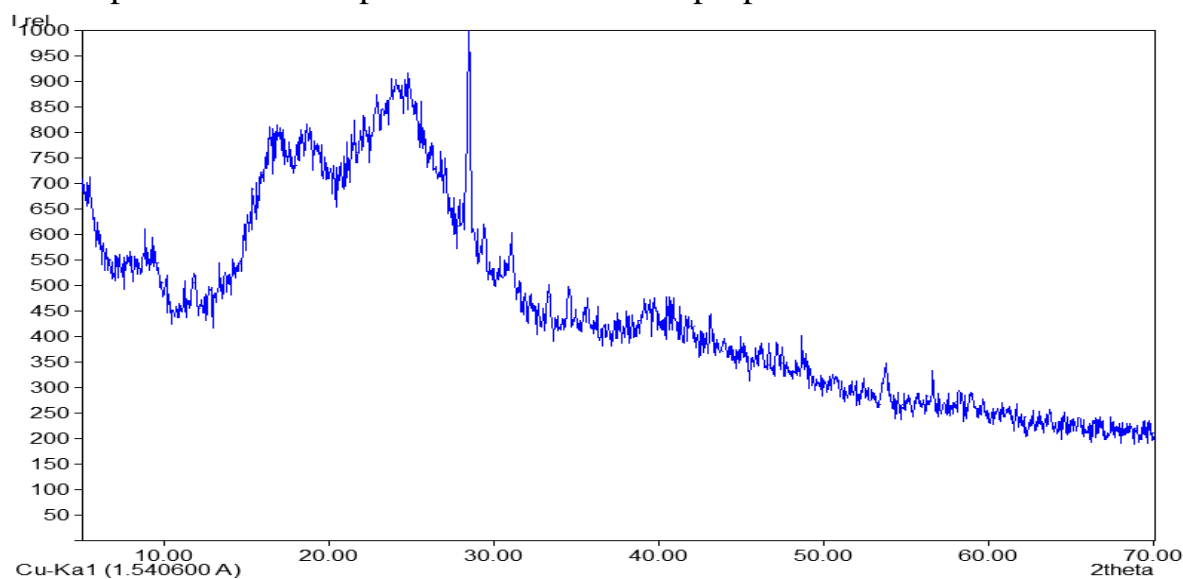


Figure 1. X-ray structural analysis of a modified basalt-filled polyvinyl chloride composite sample.



Based on the experimental results, we can observe that the physico-mechanical properties and technological indicators of the polymer composite material change in a positive direction when 4% of modified basalt is added to the composition of polyvinyl chloride as a filler. The positive change in these results is caused by the polyelemental composition of basalt, which is added as a filler to polyvinyl chloride, and these compounds include many metal oxides. X-ray analysis of samples is provided for analytical observation of metals.

List of used literature

1. Jumaeva AA , S.Sh. Lutfullaev . Basalt – As a filler for polymer materials. Collection of materials of the international scientific and practical conference on the topic "Importance of innovative technologies in solving current problems in the processing of chemical, food and chemical technology products". Namangan. November 23-24, 2021. 174-176 p.

2. Jumaeva AA, Lutfullaev S. Sh . Dispersed fiber basalt as a filler for polymer composites. Collection trudov mejdunarodnoy nauchno-technicheskoy conference " Paradigm and modern chemical-physical technology: traditional and innovative approaches" Yangier-2022. 85-86 p.

3. Jumaeva AA, Lutfullaev S. Sh . Mesto is basalt today _ Collection trudov mejdunarodnoy nauchno-technicheskoy conference " Paradigm and modern chemical-physical technology: traditional and innovative approaches" Yangier-2022. 118 p.

4. Jumaeva AA, Use of basalt as a filler for polymers. Problems and prospects of innovative techniques and technologies in agriculture and food industry. International scientific and scientific-technical conference. Tashkent. 23.04.22; 24.04.22 p. 120-122.

5. Jumaeva AA, New fillers for polymeric composite materials. Problems and prospects of innovative techniques and technologies in agriculture and food industry. International scientific and scientific-technical conference. Tashkent. 23.04.22; 24.04.22. 296-298 p.

6. Jumaeva AA, Lutfullev S. Sh . Using a natural basalt as a filler. International scientific and educational electronic journal "Education and science in the XXI century". Vypusk , #22 (volume 4) (January, 2022) Moscow. 331-334 p.

7. Jumaeva AA, Lutfullev S.Sh ., Madiev R, Abdurakhmanov A. Deformation-strength properties of PVC compositions filled with modified basalt. Solutions and



prospects of practical implementation of innovative developments in the field of chemistry and chemical technology. Scientific and practical conference of the Republic. Against-26.04.2023; 27.04.2023. P.204-205.

8. Jumaeva AA, Lutfullev S.Sh. , Madiev R, Abdurakhmanov A. Basalt composites as an innovative universal material. Solutions and prospects of practical implementation of innovative developments in the field of chemistry and chemical technology. Scientific and practical conference of the Republic. Against-26.04.2023; 27.04.2023. P. 301-303.

9. Kadykova Yu.A ., Bredykhin PA, Arzamastsev SV, Kalganova SG Kompleksno-modifitsirovannye basaltoplasty // Vestnik Voronezhskogo gosudarstvennogo university engineer technological . - 2018. - Т. 80. - No. 2 (76). - S. 297-301.

10. Tojiev PJ, Normurodov BA, Turaev Kh.Kh ., Djalilov AT, Nurkulov FN Izuchenie physico -mechanical properties of basalt soderzhashchih polyethylene composites // Journal "Composition materials". - 2017. - No. 4. - S. 66-69.

11. Tojiev PJ, Normurodov BA, Turaev Kh.Kh ., Djalilov AT, Nurkulov FN Izuchenie thermostability composite neither easy Polyethylene , reinforced basalt volknom // Journal « Kompozitsionnye material » -2018. - #1. - S.62-65.

12. Kuleznev VN, Shershnev VA Chemistry and physics of polymers: review posobie for student vuzov , obuchayushchikhsya po napravleniyu " Khimicheskaya technology" / Izd . 3-e, ex. - St. Petersburg: Lan, 2014. - 367 p.

13. Djalilov AT, Tojiev PJ, Normurodov BA, Turaev H.Kh ., Nurkulov FN Effect of fillers on thermal properties of polymers // Journal " Doklady Academy science Republic of Uzbekistan". - 2018. - #2. - P.99-102.