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according to stability diagram; 3. Influence of alkaline solution Si/K molar ratio onto geopolymer materials; a. Structure of synthesized materials; b. Mechanical properties; IV. CONCLUSION; ACKNOWLEDGEMENTS; REFERENCES; SODIUM GEOPOLYMER REINFORCED WITH JUTE WEAVE; ABSTRACT; INTRODUCTION EXPERIMENTAL PROCEDURE Method for Producing Geopolymer Matrix; Method for Producing Jute Composite; Alkali Treatment; MECHANICAL TESTING; Tensile Testing; Experimental Set-up; Results and Discussion; Comparison of Jute-reinforced Geopolymer with Jute-reinforced Mortar; Four-point Flexure Testing; Experimental Set-up; Results and Discussions; Impact Testing; Experimental Set-up; Results and Discussion; Peak Load; Deflection; Total Energy Absorbed; Comparison of Jute-reinforced Geopolymer with Jute-reinforced Concrete; X-ray Diffraction (XRD); THERMOGRAVIMETRIC ANALYSIS (TGA) Results and Discussions Scanning Electron Microscopy (SEM); Energy Dispersive X-ray Spectroscopy (EDS); Results and Discussions; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; POTASSIUM GEOPOLYMER REINFORCED WITH ALKALI-TREATED FIGUE; ABSTRACT; INTRODUCTION; EXPERIMENTAL PROCEDURE; Method for Producing Geopolymer Matrix; Alkali Treatment; Method for Producing Figue Composite; Experimental Procedure; Results and Discussions; Tensile Testing; Flexure Testing; Impact Testing; X-ray Diffraction (XRD); Thermogravimetric Analysis (TGA); Scanning Electron Microscopy (SEM) Energy Dispersive X-ray Spectroscopy (EDS) CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; DESIGN OF WOOL-GEOPOLYMER POTS; ABSTRACT; INTRODUCTION; EXPERIMENTAL; Materials; Methods; RESULTS AND DISCUSSION; CONCLUSIONS; ACKNOWLEDGEMENTS; REFERENCES; RICE HUSK ASH AS A SILICA SOURCE IN A GEOPOLYMER FORMULATION; ABSTRACT; INTRODUCTION; EXPERIMENTAL PROCEDURE; Preparation of RHA; Geopolymer Samples Preparation; Flexural strength measurements; RESULTS; DISCUSSION; SUMMARY AND CONCLUSION; REFERENCES; ALUMINA-BASED PHOSPHATE CEMENT; ABSTRACT; 1 INTRODUCTION; 2 EXPERIMENTAL; 3. RESULTS; 4 DISCUSSION 5 CONCLUSION

Sommario/riassunto

This issue contains 31 papers from The American Ceramic Society's 38th International Conference on Advanced Ceramics and Composites, held in Daytona Beach, Florida, January 26-31, 2014. This issue includes papers presented in the following Symposia and Focused Sessions: Symposium 2 - Advanced Ceramic Coatings for Structural, Environmental, and Functional Applications; Symposium 10 - Virtual Materials (Computational) Design and Ceramic Genome; Symposium 11 - Advanced Materials and Innovative Processing Ideas for the Industrial Root Technology; Symposium 12 - Materials for Extreme Environments
