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Experimental and Computational Studies of Matter In Extreme Environments¹ CHARLES WEATHERFORD, Physics Department, Florida A&M University, NOSA EGIEBOR, Tuskegee University, KENNEDY REED, PE-TER BEIERSDORFER, HUI CHEN, Lawrence Livermore National Laboratory, CHANGYONG QIN, Benedict College — A research consortium (Experimental and Computational Studies of Matter In Extreme Environments) involving Tuskegee University, Florida A&M University, Benedict College, and Lawrence Livermore National Laboratory, has been established with the support of the National Nuclear Security Administration. The overall objectives of the consortium project are to: develop structures for a functional and sustainable consortium that is engaged in research and education in materials and matter at extreme conditions; establish MSI (minority serving institutions) fellowship programs in science and engineering of materials under extreme environments (MEE); facilitate access to DOE large-scale experimental and computational facilities; engage students and faculty in ongoing research projects in MEE fields. There are four subprojects composing the consortium: (1) Investigation of the Corrosion of Nuclear Energy Materials in the Presence of Ionizing Radiation from Swift Moving Ions; (2) Experimental and Computational Studies on High Temperature Plasmas; (3) First Principles Simulations of Radiation Damage and Analysis; (4) Summer Institutes for Training of Students and Faculty.

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