

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JOHN F. KENNEDY SPACE CENTER

RECOMMENDATION AND DETERMINATION
TO SOLICIT FROM ONE SOURCE

I recommend that NASA, John F. Kennedy Space Center negotiate with the Office of Sponsored Programs Administration at Iowa State University only to secure the services of Dr. Nicola Bowler, a university expert in broadband dielectric spectroscopy, to assist NASA in system training, procedure development, mixing model specification, and data analysis. The details of this request appear in the associated statement of work.

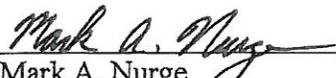
The total estimated cost of this effort is [REDACTED] and the estimated period of performance is fifteen months.

This recommendation is made pursuant to FAR 13.106, for the acquisition of supplies or services determined to be reasonably available from only one source. Competition is impractical for the following reasons:

Dr. Nicola Bowler is an Associate Professor in the Department of Materials Science and Engineering, and in the Department of Electrical and Computer Engineering, at Iowa State University. As such, she has an unusually broad range of expertise relevant to this proposed work. Dr. Bowler has published widely on the topic of electrical properties of mixtures and has conducted most of her recent experimental work employing broadband dielectric spectrometry. Of particular relevance, she has studied the influence of water on the dielectric spectrum of polymers and particle composites and uses the same dielectric spectrometer (Novocontrol) as planned for this proposed work.

Low frequency dielectric spectroscopy with granular materials and the effects of water on their spectra is a fairly narrow field of study. Dr. Bowler's experience in this field and specific knowledge of the associated mixing models make her uniquely qualified for this work. Additionally, few departments have the identical test equipment that NASA will be using to carry out this project for the Department of Defense.

Based upon the above, I hereby determine that the circumstances of the contract action deem only one source reasonably available for this acquisition. I hereby certify that this statement is accurate and complete to the best of my knowledge and belief.

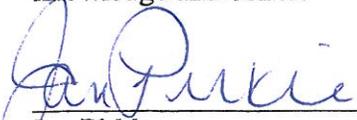


Mark A. Nurge
NASA/KSC Applied Physics Lab, NE-L5

3/5/12

Date

I hereby certify that this justification is accurate and complete to the best of my knowledge and belief.



Jan Pirkle
Contracting Officer

3/5/12

Date