

November 13, 2019

Enquiry No.: 03/AE&AM/NK/CPDA/2019-20

Notice Inviting Quotations

Quotations are invited for the supply of the following testing as per mentioned specifications under CPDA account of Dr. Niloy Khutia, Associate Professor, Department of Aerospace Engineering and Applied Mechanics (**approval order no: 6118/D(FW)/19 dated 25th July, 2019**). The sealed quotations should be addressed to the Head of the Department indicating enquiry number with date on the top of the envelope.

The quotation should include all kind of taxes/duties and delivery charges of the item to the Office of the Department of Aerospace Engineering and Applied Mechanics, IEST Shibpur.

SL No.	No of samples	Desired output from EBSD analysis
1	10 EBSD analysis (material-Dual phase steel and total no of scans 20)	<i>Characterization for Volume fraction, grain shape and size distribution, orientation distribution, average misorientation distribution in order to determine low angle grain boundary (LABs) and high angle grain boundary (HABs), preferred orientation distribution through texture analysis (with PF and IPF) and strain analysis of failed tensile specimens through OIM for : Ferrite, Martensite, Retained austenite (if any) and Ferrite/martensite interface. (Carrying out EBSD scans in two specified regions for each specimens and each scan is for approximately 2 hour of EBSD scan)</i>
2	03 EBSD analysis (Material- AlSi10Mg, and total no of scans-9)	<i>Carrying out EBSD scans in three specified regions for specimens Characterization for Volume fraction, grain shape and size distribution, orientation distribution, average misorientation distribution in order to determine low angle grain boundary (LABs) and high angle grain boundary (HABs), preferred orientation distribution through texture analysis (with PF and IPF) and strain analysis of failed tensile specimens through OIM for the three specified regions in the AlSi10Mg samples. (Carrying out EBSD scans in three specified regions for each specimens)</i>
3	13 (Specimen preparation for EBSD)	<i>Specimen preparation for EBSD for all specimens(machining, grinding, paper polishing and electropolishing and any other process required for EBSD sample preparation)</i>

Dr. Niloy Khutia
13-11-19

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Note:

- (1) Raw data is to be provided in a file format which is compatible with popular OIM softwares (like, HKL-5 Oxford instruments or TSL-OIM or equivalent)
- (2) Total no of scans required is 29 which is equivalent to 58 scan hours in EBSD machine.

Last date of submission of sealed quotation is **4:00 P.M on 20th November, 2019** and tenders will be opened at **05:00 P.M on 20th November, 2019** in the Office of the Department of Aerospace Engineering and Applied Mechanics, IEST Shibpur.

for *S. Majumdar*
(Dr. Amit Roy Chowdhury)
Professor and Head
Department of Aerospace Engineering and Applied Mechanics
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