

## CONCLUSION

-Estimation of heat fluxes and surface temperature values ~~got attained~~ by spacecraft vehicles ~~at the time of during the~~ atmospheric reentry is essential for a reentry without any mechanical and physical issues.

~~So Therefore~~, we evaluated ~~the materials'~~ emissivity and catalytic efficiency ~~of the materials~~ used in

aerospace applications. ~~Fe~~ ~~We aimed to~~ design and ~~then~~ utilize materials having high emissivity and low

~~catalycity-catalytic~~ efficiency ~~was our aim~~. In this ~~paperstudy~~, we ~~have put across~~ ~~discuss the~~

measurement of hemispherical emissivity and atomic recombination coefficients of ~~carbon fibre~~

~~reinforced silicon carbide fusion samples~~. ~~C/SiC composites that can be applied to the TPS of spacecrafts~~  
~~vehieles can use these samples in application~~.

**Comment [A1]:** In academic writing, information is presented with accuracy and conciseness. Formal language is a hallmark of academic English. One way to ensure conciseness in expression is converting phrasal verbs to formal words. In this instance, "got" is replaced with "attained."

**Comment [A2]:** To create an easy flow of ideas, transition words such as however, therefore, or moreover can be used. This usage enhances coherence of ideas in the paragraph and the manuscript on the whole.

**Comment [A3]:** Using the correct technical word aids technical clarity to the text, further enhancing the clarity.

At ~~the~~ MEDIASE ~~facilities~~ ~~facility~~, we tested the C/SiC ~~sample~~ ~~samples at the~~ temperature range ~~of~~ 950–

1900 K and both ~~at~~ 4 Pa and 200 Pa. ~~the samples~~ ~~presents somewhat~~ ~~exhibited relatively~~ high emissivity values of ~~roughly speaking~~ ~~approximately~~ 0.7. This result ~~shows~~ ~~confirms~~ that the ~~oxide~~ ~~glassy oxide~~ layer

~~greatly~~ determines the ~~radiative behaviour~~ ~~radiative behavior~~ of SiC-coated C/SiCs. ~~Oppositely~~ ~~In~~

~~contrast~~, in the MESOX facility, ~~the catalytic~~ ~~ity~~ measurements demonstrated a low oxygen recombination

coefficient at high temperature (~0.07 at 1800 K). The ~~test~~ ~~tests~~ have ~~also~~ demonstrated ~~also~~ strong

dependence of the recombination coefficient on surface morphology, which ~~only~~ varies ~~only~~ slightly

among ~~un~~ samples because of ~~manufacture's troubles~~ ~~manufacturing concerns~~. Whereas samples from the

same production batch ~~has~~ ~~have~~ shown different recombination coefficient values, the general ~~catalycity~~

~~catalytic~~ trend remains the same. This ~~condition makes it possible for~~ ~~characteristic enables~~ evaluation of

~~the activation energy of~~ atomic oxygen recombination ~~activation energy, i.e.~~ (~30 KJ/mol).

**Comment [A4]:** When the second sentence illustrates, explains or exemplifies the idea expressed in the first sentence, a colon is used between the two sentences.

**Comment [A5]:** "Glassy" is an adjective that modifies the noun "oxide layer." This text was rearranged for grammatical accuracy.

**Comment [A6]:** An introductory phrase should be separated from the main clause using a comma.

~~Our results substantiate the suitability of a~~ C/SiC application ~~suitability in the~~ hot structures for ~~the reentry~~

vehicles ~~reentering again in the atmosphere is made a solid case by the results of our paper~~. However,

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strategic manufacturing process control for C/SiC ~~manufacturing~~production to obtain specific ~~type of~~ morphology of samples would further ascertain defined emissivity ~~value~~ and ~~eatalycity~~catalytic efficiency~~value~~.

SAMPLE