



**Indian Institute of Technology Hyderabad**  
**Kandi, Sangareddy-502285, Telangana, INDIA**

Date of Advertisement: March 27<sup>th</sup>, 2022

**Subject:**

**Advertisement for the post of Junior Senior Research Fellow (JRF) (No. of Post: One) for three year**

Applications are invited from Indian nationals with good academic background to attend the online interview for the post of **Junior Research Fellow** position (No. of Post: One) as a part of SERB project. Details are given below:

|                           |   |
|---------------------------|---|
| Name of the Post          | <b>Junior Research Fellow</b>   |
| No. of Post               | One   |
| Project Title             | <b>High Entropy Carbide Based Cutting Tool Inserts</b>  |
| Brief Description of work | CNC and Lath machines use variety of tool inserts. This project is on fabrication of cutting tool inserts through powder metallurgy processing. Multicomponent carbides to be used as a base material and suitable multicomponent alloy, such as high entropy alloys, etc. to be used as a binder phase for high density sintering. Work involves processing of metals and ceramic powders, mechanical alloying, compaction, sintering, heat treatments, phases and microstructure characterization, metallographic sample preparations, testing of mechanical and other properties, etc. |
| Period of Appointment     | The appointment will be initially for a period of <b>Eleven months</b> and based on performance, the appointment could be extended yearly basis (based on satisfactory performance) till the end of the project (3 years). The selected candidates will be eligible for Ph. D registration if they satisfy all the criteria of IIT Hyderabad.   |
| Remuneration              | INR 31000/- pm + HRA (as per norms)   |
| Essential Qualifications  | M.Tech./ M.E./ or equivalent degree in Metallurgical Engineering/ Materials Science/ Ceramics Engineering/ Mechanical Engineering/ Manufacturing/ Production Engineering or related areas. Candidate having MTech/ME degrees should have previously qualified GATE once.<br><br>OR<br><br>B.Tech./ B.E. or equivalent degree in Metallurgical Engineering/ Materials Science/ Ceramics Engineering/ Mechanical Engineering/ Manufacturing/ Production Engineering or related areas. Candidate having B.Tech./B.E. degree should have a valid GATE score.                                  |
| Age Limit                 | 35 years  |
| Desirable                 | Experience in some of the following areas: powder metallurgy, sintering, processing of metals, ceramic powders, mechanical alloying, microstructural study, metallography practices, heat treatments, mechanical testing, familiar with various material characterization, processing and testing equipment, etc.   |

**Note:**

1) Interested applicants should **apply online** by **14<sup>th</sup> April, 2022**, through the online google form:

[https://docs.google.com/forms/d/e/1FAIpQLSde04yExtMI871NYi5pE1e8OsQzqsBUUM5zvaVodOfGGpEUXg/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSde04yExtMI871NYi5pE1e8OsQzqsBUUM5zvaVodOfGGpEUXg/viewform?usp=sf_link)

2. The interview of shortlisted candidates will be conducted online. The date and time of the interview will be informed after shortlisting. Selection committee may set some cut-off mark for qualifying degrees for shortlisting, if number of applications are large. For any query in this regard, candidates may write to Prof. Bharat B. Panigrahi, Principal investigator (Email: [bharat@msme.iith.ac.in](mailto:bharat@msme.iith.ac.in)), Department of Materials Science and Metallurgical Engineering.