कार्यक्रम/PROGRAMME:

16:30 h: डॉ. इन्द्रनील चट्टोराज, निदेशक सीएसआईआर-सीजीसीआरआई द्वारा डॉ. आत्माराम को श्रद्धांजलि एवं स्वागत भाषण

16:30 h: Welcome address and tribute to Dr. Atma Ram by Dr. Indranil Chattoraj, Director, CSIR-CGCRI

16:40 h: डॉ. रंजन सेन, मुख्य वैज्ञानिक सीएसआईआर-सीजीसीआरआई द्वारा अध्यक्ष का परिचय

16:40 h: Introduction of Speaker by Dr. Ranjan Sen, Chief Scientist, CSIR-CGCRI

16:45 h: प्रो. दीपंकर बनर्जी, भारतीय विज्ञान संस्थान, बैंगलोर एवं अध्यक्ष, अनुसंधान परिषद, सीएसआईआर-सीजीसीआरआई द्वारा 15 वाँ आत्माराम स्मृति व्याख्यान

16:45 h: 15th Atma Ram Memorial Lecture by Prof Dipankar Banerjee, Indian Institute of Science, Bangalore & Chairman, Research Council, CSIR-CGCRI

17:45 h: निदेशक द्वारा स्मृति चिह्न प्रदान।

17:45 h: Presentation of Memento by Director, CSIR-CGCRI

17:50 h: डॉ. भारत भूषण झा, मुख्य वैज्ञानिक एवं प्रमुख, पीएमडी तथा एएमएमसीडी द्वारा धन्यवाद ज्ञापन

17:50 h: Vote of thanks by Dr. Bharat Bhushan Jha, Chief Scientist & Head, PMD & AMMCD

15th Atma Ram Memorial Lecture

15 वां आत्माराम स्मृति व्याख्यान

विषय/Title:- उड्डयन में प्रयोग हेतु पदार्थ सामग्रियाँ/Materials in Flight

वक्ता: प्रो. दीपांकर बनर्जी

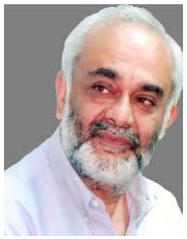
भारतीय विज्ञान संस्थान, बैंगलोर एवं अध्यक्ष, अनुसंधान परिषद, सीएसआईआर-सीजीसीआरआई

Speaker: Prof. Dipankar Banerjee Indian Institute of Science, Bangalore & Chairman, Research Council, CSIR-CGCRI

14 सितंबर/September-2018

सीएसआईआर-सीजीसीआरआई, कोलकाता

CSIR-CGCRI, Kolkata



About the Speaker - Dr. Dipankar Banerjee graduated from IIT Madras in 1974 and obtained his Ph D from the Metallurgy department of the Indian Institute of Science in 1979. He then joined the Defence Metallurgical Research Laboratory of the Defence Research and Development Organisation (DRDO) and was the Director of the laboratory from 1996 to 2003. As the director of DMRL, Dr. Banerjee provided leadership for many critical defence related materials programs including armour for the main battle tank, special naval steels for the Indian Navy's aircraft carriers, and a variety of materials, such as Ti alloys and Ni base superalloy processing for jet engines.

He took over as Chief Controller of Research and Development for DRDO's Aeronautics and Materials Sciences laboratories from 2003 and coordinated military engine and combat aircraft programmes, and major system development efforts in military aircraft, unmanned aerial vehicles, cruise missiles and airborne early warning systems. At this time he also initiated a variety of advanced materials programs directed towards stealth, electronics and ultrahigh temperature use. He is currently professor of Materials Engineering at IISc where his research focuses on the science of a variety of engineering materials.

Dr. Banerjee is a fellow of the all Indian academies of sciences and engineering. He has been recognized as a distinguished alumnus of the Indian Institute of Technology, Madras. He has been awarded the Shanti Swaroop Bhatnagar Prize in the field of Engineering Sciences, DRDO's Technology Leadership Award in 2008, DRDO's Lifetime Achievement award in 2014, INAE's Jai Krishna memorial Award in 2011 and he has also been recognized with the Padma Shri by the Government of India.

Abstract - One of the defining events of the past century was humankind's first flight in 1903. The key technology factors that determine the performance, affordability and environmental impact of flying vehicles are the optimisation of the airframe and engine structural features to maximise the lift to drag ratio, the thrust to weight ratio of the engine and the overall aircraft system, and the specific fuel consumption of the propulsion system. A significant part of story of the evolution of flight is related to the evolution of materials in flight in their effect on these metrics. We trace the use of materials in aerospace from the first flight of the Wright Brothers to the present day with a focus on efforts in our country to develop the technology and application engineering of such materials. The requirement of integrity and safety in these man-rated applications coupled with the extraordinarily demanding environment makes the materials development and application challenge unique in its many facets.

Director and Staff Members of
CSIR – Central Glass and Ceramic Research Institute, Kolkata

Cordially invite you to the
15th Atma Ram Memorial Lecture

Materials in Flight

To be delivered by

Prof. Dipankar Banerjee
Indian Institute of Science, Bangalore &
Chairman, Research Council, CSIR-CGCRI

on 14th September, 2018 at 16:30 hrs
in Meghnad Saha Auditorium of the Institute

Kolkata
8th September, 2018

Director
CSIR-CGCRI