

Programme

- 11.30 AM Welcome address by Dr K Muraleedharan, Director, CSIR-CGCRI
- 11.40 AM Tribute to Founder Director Dr Atma Ram by Mr Kamal Dasgupta, Chief Scientist, CSIR-CGCRI
- 11.45 AM Address & Introduction of Speaker by Dr B K Sarkar, Former Director, CSIR-CGCRI
- 12.00 12th Atma Ram Memorial Lecture by Dr G Sundararajan
- 13.00 PM Presentation of Mementoes to Dr G Sundararajan and Dr B K Sarkar by Director, CSIR-CGCRI
- 13.05 PM Tea & Snacks in KD Sharma Multipurpose Hall

कार्यक्रम

- 11.30 बजे डॉ० के मुरलीधरन, निदेशक, सीएसआईआर-सीजीसीआरआई द्वारा स्वागत भाषण
- 11.40 बजे श्री कमल दासगुप्त, मुख्य वैज्ञानिक, सीएसआईआर-सीजीसीआरआई द्वारा संस्थापक-निदेशक डॉ० आत्माराम को श्रद्धांजलि
- 11.45 बजे डॉ० बी के सरकार, पूर्व निदेशक, सीएसआईआर-सीजीसीआरआई द्वारा संबोधन एवं वक्ता का परिचय
- 12.00 बजे डॉ० जी सुंदरराजन द्वारा 12वां आत्मा राम स्मृति व्याख्यान
- 13.00 बजे निदेशक, सीएसआईआर-सीजीसीआरआई द्वारा डॉ० जी सुंदरराजन और डॉ० बी के सरकार को स्मृति चिह्न
- 13.05 बजे के. डी. शर्मा मल्टीपरपज हॉल में अल्पाहार



The 12th Atma Ram Memorial Lecture 12वां आत्माराम स्मृति व्याख्यान

**Title - Advanced Ceramics : Research & Technology Development at ARCI
by Padma Shri Dr G Sundararajan, Director,
International Advanced Research Centre for
Powder Metallurgy and New Materials**

**शीर्षक : उन्नत सिरामिक : एआरसीआई में अनुसंधान एवं प्रौद्योगिकी विकास
वक्ता : पद्मश्री डॉ जी सुंदरराजन, निदेशक, इंटरनेशनल एडवांस्ड रिसर्च सेन्टर फॉर पाउडर मेटलर्जी एण्ड न्यू मटीरियल्स**

26 August /अगस्त, 2015



**सीएसआईआर - सीजीसीआरआई
CSIR-CGCRI**



About the Speaker: Dr GSundrarajan, obtained his BTech (Metallurgy) from IIT, Madras in 1976 and MS and PhD from Ohio State University, USA in 1979 and 1981 respectively. In 1982, he joined DRDO-DMRL as a scientist and continued till 1997 before being appointed as Director of ARCI, Hyderabad. Dr Sundrarajan also holds joint appointment as Professor at Dept of Metallurgical & Materials Engineering, IIT-Madras, Chennai.

Dr Sundrarajan has made outstanding contributions to the areas of tribological behaviour (erosion, sliding wear, abrasion) of metallic materials, composites and coatings, high temperature deformation and fracture behaviour of superalloys and other materials, laser surface modification (surface alloying cladding, transformation hardening) and laser materials processing (cutting, drilling & welding) of engineering materials and towards the development of novel coating technologies like detonation spray coating, electro spark coating, microarc oxidation coating, cold spray coating and EB-PVD coating technology. He is also responsible for establishing the Center for Laser Processing of Materials (now a part of ARCI), the Surface Engineering Division at ARCI, the Center for Fuel Cell Technology at Chennai, and the Centre for Sol-Gel Nanocomposite Coatings at ARCI. Dr Sundrarajan has made notable contributions to the development, demonstration and commercialization of materials-based technologies. Over the last 10 years, more than 25 technologies have been transferred to 35 private industries in India.

Dr Sundrarajan is a recipient of Padma Shri by the Govt of India in 2014, Shri Om Prakash Bhasin Award (2014), Shanti Swarup Bhatnagar prize for Engineering Science (1994), Best Metallurgist award (1995), FICCI award for Materials Science (2004) and National Metallurgist Award (2013) among his many accolades. Dr Sundrarajan is also a Fellow of the Indian Academy of Sciences (1992), Indian National Science Academy (1996), Indian National Academy of Engineering (1999), National Academy of Science (2002), Indian Institute of Metals (2002), The American Society for Materials (2005) and The American Ceramic Society (2012). Dr Sundrarajan is a J C Bose Fellow (2006 to date). He has authored about 250 papers and guided many PhD students. He is currently the Vice President of the Indian Academy of Sciences.



About the Founder: Dr Atma Ram was the Founder Director of CSIR- Central Glass & Ceramic Research Institute, Kolkata (1950-66) and DG-CSIR (1966-71). He was awarded DSc by the Allahabad University for his notable contribution in fundamental research on the chemistry of photochemical reactions in the presence of formaldehyde and the mechanism of its origin in the upper atmosphere. Born on October 12, 1908, Dr Atma Ram's work extensively covered fundamental and applied sciences and technology of production. Under his leadership, CSIR-CGCRI rose to world class stature through indigenous development and production of optical glass. He contributed significantly to the production of heat insulating materials from waste mica and foam glass that triggered development of entirely new industries. His work also contributed to the indigenous production of chemical porcelain, glass electrodes coloured glasses, special refractories etc. In the area of fundamental silicate science, Dr Atma Ram conducted studies on the origin of colour in copper-red glass which has been highly referred by peers. Dr Atma Ram was elected Honorary Fellow of the Society of Glass Technology, Sheffield (UK), which is a rare honour bestowed upon individuals for their notable contributions in glass technology. In 1959, Government of India conferred upon Dr Atma Ram the Padma Shri and the first Shanti Swarup Bhatnagar Medal. His life came to abrupt end on February 6, 1983.

Abstract –Advanced Ceramics: Research & Technology Development at ARCI : Over the years, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI) has carried out substantial scientific research and technology development in the areas of oxide and non-oxide ceramics. The presentation will highlight the work carried out at ARCI in the areas of transparent magnesium aluminate spinel, zinc sulphide ceramic domes, transparent polycrystalline alumina, SiC based space mirror substrates, ceramics based armour systems for strategic applications and sintering of nanocrystalline SiC by spark plasma sintering.



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

cordially invite you to

**The 12th Atma Ram Memorial Lecture
“Advanced Ceramics: Research & Technology
Development at ARCI”**

to be delivered by

Padma Shri Dr G Sundrarajan, FNA, FASc, FNASc, FNAE
Director, International Advanced
Research Centre for Powder Metallurgy and New Materials

at 11:30 AM on 26th August, 2015
at Meghnad Saha Auditorium of the Institute

Kolkata
20th August, 2015

Director
CSIR-CGCRI