TOPICS

Ecological and energy-efficient processing of functional materials

Green Synthesis and recyclability of new materials and processes

Functional materials for renewable fuels and energy production

Materials integration for devices and modules

Advanced materials - sustainable use and technology transfer issues

Societal, educational and economic aspects of materials and energy

Organizers

Prof. Dr. Sanjay Mathur Institute of Inorganic Chemistry University of Cologne, Germany

Prof. Dr. Alexander Michaelis Fraunhofer IKTS Dresden, Germany

Prof. Bodh Raj Mehta Indian Institute of Tech. Delhi Delhi, India

Research in Germany Mage Control of Ideas





International Workshop on

"Advanced Materials Challenges for Alternative Energy Solutions" (AMAES)

SCOPE

Building a sustainable energy system represent one of the mega-challenges of our times that has triggered a quest for alternative energy solutions both in academia and industry. The research and development efforts in identifying alternative energy solutions are not only driven by the limited supply of fossil fuels and negative environmental impact of an oil-based energy cycle but even more by the materials challenges that need to be overcome to exploit new energy solutions. Innovative materials technologies continue to enrich our daily comfort and standard of living but most of the times they undergo a long period of waiting either due to the delays in translation efforts or lack of confidence. Further the validation of claims and levelized cost of energy are essential facets of an R&D dialogue in alternative energy scenarios, also helpful for decision makers is one of the possible outcomes of an international discussion forum that this workshop is expected to provide.

This interdisciplinary forum will discuss the necessity to identify, develop, assess and integrate novel materials those overcome their intrinsic theoretical bulk limits and are able to manifest unprecedented material properties, while keeping the fabrication cost and environmental footprint to a minimum. A panel of internationally renowned scientists will put forward their thoughts on forming new scientific alliances and cooperation among scientists from India, Germany and abroad to tackle the materials challenges for new technologies.

The workshop will be held from 15.-18. September in the Park Hotel in New Delhi located very close to the Connaught Circus, New Delhi.