Materials and Millennium Development Goals (MDGs):

Amidst the global financial crisis, UN Secretary General, Ban Ki-moon has appealed to World Leaders to “keep the promise” of the millennium declaration for a better world outlined in the eight Millennium Development Goals (MDGs). World Leaders will gather in New York, September 2010 to devise a strategic plan for achieving the MGDs during the period 2010-2015.

With MAM-10 focused on ‘New Science and Technologies for Improving Human Lives, we have organized a pre-MAM-10 workshop to reinforce the hugely significant contribution of materials to human development. In this context, all stakeholders from Government, Academia, Private Sector and Civil Society have been invited to this two day workshop on “Advanced Materials” with particular focus on how their development and use can help to achieve the MDGs.

Pre-MAM-10 Workshop Goals:

The goal of the workshop is to explore current developments in the syntheses, production, structures, behaviors and applications (current and futuristic) of advanced materials and related modelling, policy and ethical issues. The desired outcome is stimulation of research and development activities in this area by diverse stakeholders in both developed and developing economies. As demonstrated recently in case of novel water purification nano-materials or nano-silver coated food wrappings, some of the most effective solutions to poverty can be affordable advanced materials and technologies. Thus, participation of developing economies in research and development of macromolecular and supramolecular materials is vital for consolidating the link between advanced materials and achievement of some millennium development goals.

Workshop Day 1: Friday August 13, 2010

9:00 AM -12:00 PM Morning Session

Advanced Materials for Improving Water, Sanitation, and Environmental Sustainability:

Sustainable and affordable access to safe drinking water, basic sanitation and the protection of biodiversity and natural resources is outlined by Goal 7. Nano- and supramolecular materials offer exciting new opportunities towards achieving this goal. One example is that of the efficient purification of water through such efforts. Today, workshop participants will explore these emerging opportunities.

2:00-6:00 PM Afternoon Session

Advanced Materials for Improving Health:

The reduction in child mortality, improvement in maternal health and control of diseases such as HIV/AIDS and malaria are the main components of Goals 4 - 6 respectively. Materials for both preventative, diagnostic and treatment interventions including new medicines, drug delivery systems and diagnostic tools will be discussed during this session of the workshop.
9:00 AM -12:00 PM Morning Session

Advanced Materials for Improving Food and Energy Security:

Energy sustainability and Food security is essential to the “eradication of extreme poverty and hunger”, i.e. Goal 1 of the MDGs. Global access to food and energy that is affordable, safe and produced with minimum negative impact on our global ecosystem is critical to achieving this goal. In this session we will discuss the use of new materials in food production, processing and storage and explore new materials for solid state lighting solutions, energy production and energy storage.