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# The 204<sup>th</sup> iCeMS SEMINAR

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**Tue 24 May 2016**  
**16:00–17:00**

## **Pencils, Paper and Movie Discs: Curious Minds and Materials Discoveries**

Lecturer: Prof **Jiaxing Huang**

Department of Materials Science and Engineering  
Northwestern University

Venue: 2nd Floor Seminar Room

iCeMS Main Building, Kyoto University

Curiosity is a fundamental driving force for scientific. I will discuss a few curiosity-driven discoveries inspired by non-scientific sources that have led to new hypotheses and solutions for solving material problems. For example, crumpled paper balls in a waste basket inspired a new form of graphene-based materials that can resist aggregation and disperse in arbitrary solvents without the need for surface treatment, leading to their outstanding properties for energy storage and lubrication. And nanopatterns in Blu-ray movie discs have been found to be useful for improving the performance of solar cells through light trapping, and inspired a new way to design nanopatterns. On the other hand, curiosity-driven enquiry can also greatly enhance student learning experience. In one example, a question asked by students after class inspired their creation of sensors from ordinary office supplies.

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**Hosted by:** iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University

