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# The 150<sup>th</sup> iCeMS SEMINAR

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**Fri 29 November 2013**  
**11:00-11:40**

## Natural Product-like Mimicry of Annonaceous Acetogenins

Lecturer: **Prof. Zhu-Jun Yao**  
Nanjing University  
School of Chemistry and Chemical Engineering

Venue: CB-217 Lecture Room 3  
Institute for Chemical Research  
Uji Research Bldg (#19), Kyoto University

Annonaceous acetogenins have been attracting worldwide attention as potent inhibitors against proliferation of various tumor cells and environmental neurotoxins for more than 30 years. Mechanism studies mentioned that this large family of plant polyketides might target Complex I of mitochondria during their actions. Our 10-year-long studies on bullatacin, a typical cytotoxic natural annonaceous acetogenin, and corresponding natural product-like mimicking have discovered a number of simplified compounds exhibiting potent antitumor activity and significant action selectivity between human normal and cancerous cells. Furthermore, a representative mimic AA005 has been successfully developed and applied as a molecular tool to explore the unique mechanism of selective anticancer action.

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

