## 学术 报告



题 目: Remote-Controlling Materials and Devices with Light 报告人: Prof. Stefan Hecht, Department of Chemistry, Humboldt Universität zu Berlin. 时间: 2017年10月9日(星期一)上午10:30. 地点: 八里台校区蒙民伟楼201室

报告人简介: Stefan Hecht教授于2001年从加州大学伯克利分校获得博士学位,师从著名化学家Jean M.J. Fréchet。博士毕业后在柏林自由大学以及马普所米尔海姆煤炭科学研究所组建独立课题组 ,并于2006年担任柏林洪堡大学化学系讲席教授,成为德国当时最年轻的化学领域正教授 之一。Hecht教授在合成大分子,超分子化学,表面化学,以及智能材料等方面取得了一系 列开创性的成果,特别是在表面聚合反应及远程调控系统,包括光控有机催化剂,电子器 件,传感器等方面的研究成果,享有广泛的国际知名度。目前以通讯作者已经在著名期刊 Science, Nature Nanotechnology, Nature Chemistry, Nature Communication, J. Am. Chem. Soc., Angew. Chem. Int. Ed等发表文章170余篇。受邀担任多个期刊编委,例如Advanced Materials和Advanced Functional Materials客座主编,Advanced Science执行编委。Hecht教授 曾多次获得国际奖项,其中2010年获得享有德国著名的Klung-Wilhelmy-Weberbank奖。

**Prof. Stefan Hecht** studied chemistry at the Humboldt-Universität zu Berlin and obtained his PhD from the University of California at Berkeley in 2001, working under the guidance of Prof. Jean M. J. Fréchet. After establishing his own research group at Freie Universität Berlin and a subsequent position as a group leader at the Max-Planck-Institut für Kohlenforschung in Mülheim an der Ruhr, in 2006 he became the Chair of Organic Chemistry and Functional Materials in the Department of Chemistry at Humboldt-Universität zu Berlin. His research interests range from synthetic macromolecular and supramolecular chemistry to surface science, with particular focus on utilizing photochromic molecules for remotecontrolling materials, devices, and processes. More information at: www.hechtlab.de.

## 代表作:

- 1. Conditional repair by locally switching the thermal healing capability of dynamic covalent polymers with light. *Nat. Commun.* **2016**, *7*, 13623.
- 2. Remote-controlling Imine Exchange Kinetics with Photoswitches to Modulate Self-healing in Polysiloxane Networks by Light. *Angew. Chem. Int. Ed.* **2016**, *55*, 13882-13886.
- 3. Flexible non-volatile optical memory thin-film transistor device with over 256 distinct levels based on an organic bicomponent blend. *Nature Nanotechnology* **2016**, *11*, 769-775.
- 4. Optically switchable transistors by simple incorporation of photochromic systems into smallmolecule semiconducting matrices. *Nat. Commun.* **2015**, *6*, 6330.
- 5. Optically switchable transistor via energy-level phototuning in a bicomponent organic semiconductor. *Nature Chemistry* **2012**, *4*, 675-679.
- 6. Controlling on-surface polymerization by hierarchical and substrate-directed growth. *Nature Chemistry* **2012**, *4*, 215-220.
- 7. Conductance of a Single Conjugated Polymer as a Continuous Function of Its Length. Science **2009**, 323, 1193-1197.
- 8. Spatial periodicity in molecular switching. *Nature Nanotechnology* **2008**, *3*, 649-653.