

# 绿色过程与工程院重点实验室 特邀学术报告

报告人： Prof. Ulrich Kortz

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报告题目： Discrete Metal-Oxide Chemistry: Synthesis, Structure, Properties,  
and Applications

报告时间： 2015年5月26号 (周二) 15:00-17:00

报告地点： 中科院过程大厦308会议室

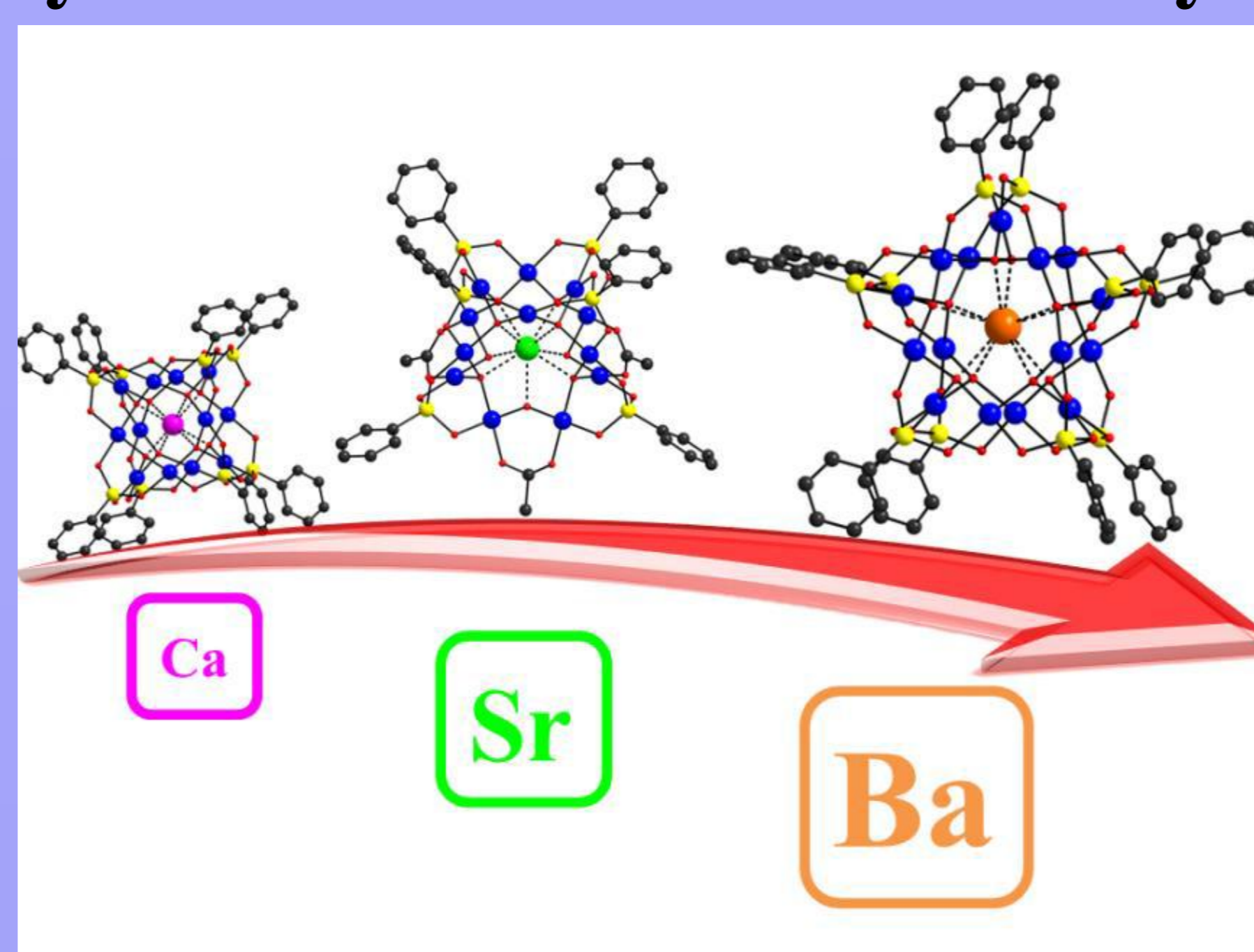


## 报告人简介：

Ulrich Kortz, 德国不来梅雅格布大学化学系教授, 博士生导师。1995年博士毕业于美国乔治敦大学, 师从著名多酸化学家M. T. Pope教授, 并先后在意大利佛罗伦萨大学和法国凡尔赛大学进行博士后研究。1997年至今先后就职于黎巴嫩贝鲁特美国大学和德国不来梅雅格布大学(原不莱梅国际大学), 已从事无机合成化学和多酸化学研究20余年。Ulrich Kortz教授是目前德国无机化学和多酸化学的学术带头人, 同时也是欧洲和世界多酸化学的领军人物之一。主要研究方向包括新型多酸基有机/无机杂化材料的设计合成以及含过渡金属的多酸基功能化合物的合成与性能开发。近年来Ulrich Kortz教授在多贵金属氧酸盐化学领域开展了大量开创性研究工作, 开拓了多酸化学研究的新领域, 受到了广泛关注。至今已经包括在*Angew. Chem. Int. Ed.*, *J. Am. Chem. Soc.*和*Chem. Soc. Rev.*等高水平学术期刊上发表科研论文220余篇, 工作被引用7571次, H指数49。并撰写三章著作章节以及10篇专利。

## 报告摘要：

The area of polyoxo-noble-metalates comprising exclusively  $d^8$  metal centers such as  $\text{Pd}^{\text{II}}$  and  $\text{Au}^{\text{III}}$  was pioneered in 2008 and 2010, respectively, and has developed rapidly ever since.<sup>1</sup> This is not unexpected, considering that this class of compounds exhibits fundamentally novel structural and compositional features, being based solely on square-planar building blocks, resulting in interesting properties and potential applications.<sup>2</sup> Polyoxopalladates(II) represent the largest subclass in the polyoxo-noble-metalate family. In terms of structural types, the symmetrical 12-palladate nanocube  $\{\text{Pd}_{12}\}$  and the 15-palladate nanostar  $\{\text{Pd}_{15}\}$ , and vacant derivatives thereof, are the most abundant. Especially for the former, many derivatives containing various central guests and capping groups are now known.<sup>3</sup> Attempts to rationally prepare novel polyoxopalladate structure types reproducibly and in decent yields have been of limited success. Here we present some novel, recent results in polyoxo-noble-metalate chemistry.



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2. N. V. Izarova, M. T. Pope, U. Kortz, *Angew. Chem. Int. Ed.* 2012, 51, 9492.
3. P. Yang, Y. Xiang, Z. Lin, B. S. Bassil, J. Cao, L. Fan, Y. Fan, M. Li, P. Jim énez-Lozano, J. J. Carb ó, J. M. Poblet, U. Kortz, *Angew. Chem. Int. Ed.* 2014, 53, 11974.

本报告由张光晋研究员特邀, 欢迎大家光临!