

第一部分：线上科普性大会报告

- 8月4日 周三
16:00-18:00
寇享直播: <https://www.koushare.com/lives/room/027679>
大会报告-1 Prof. Tom Ellis
Engineering microbes to grow materials with DNA-programmed functionalities
- 8月10日 周二
9:00-11:00
寇享直播: <https://www.koushare.com/lives/room/719879>
大会报告-2 Prof. Zhibin Guan
Bioinspired Design of Active and Dynamic Soft Materials

第二部分：线上基础知识授课 (北京大学教学网 Classin 平台)

- 8月12日 周四
08:30-09:00 开幕式 (欢迎辞、集体照、暑期学校安排介绍)
09:00-12:00 Topic 1 Prof. Chao Zhong
Materials Synthetic Biology
14:00-17:00 Topic 2 Prof. Er-Qiang Chen
Fundamentals of Polymer Physics
- 8月13日 周五
08:30-11:30 Topic 3 Prof. Yi Cao
Mechanical Analysis: From Single Molecule to Materials
14:00-17:00 Topic 4 Prof. Huibin Qiu
Macromolecular Assembly: Principles and Practice
- 8月14日 周六
08:30-11:30 Topic 5 Prof. Chunbo Lou
Fundamentals of Genetic Circuit Design
14:00-17:00 Topic 6 Prof. Haifeng Ye
Genetic Circuit Design & Construction in Mammalian Cells
- 8月15日 周日
08:30-11:30 Topic 7 Prof. Tingjian Chen
Directed Evolution of Biomacromolecules
14:00-17:00 Topic 8 Prof. Changsheng Zhang
Computer-Aided Protein Design & Introducing Rosetta

第三部分：线上“交叉中的高分子科学”前沿论坛

- 8月16日 周一
寇享直播: TBD
08:30-17:00 Symposium on Interdisciplinary Polymer Science
17:00-17:30 闭幕式

Symposium on Interdisciplinary Polymer Science

2021 年 8 月 16 日 周一

Session I: Prof. Wen-Bin Zhang

08:30-08:55	Lecture 1	Prof. Junqiu Liu
	Protein Assembly: A New Platform to Develop Biomimetic System	
08:55-09:20	Lecture 2	Prof. Tingjian Chen
	Harnessing Unnatural Nucleic Acids for the Expansion of Central Dogma	
09:20-09:45	Lecture 3	Prof. Xiaoxia Xia
	Designer membraneless organelles in living bacteria	
09:45-10:10	Lecture 4	Prof. Peilong Lu
	Computational design of transmembrane proteins	

Session II: Prof. Chao Zhong

10:25-10:50	Lecture 5	Prof. Er-Qiang Chen
	Direct Visualization of Chain Folding and Growth of Lamellae of a Dynamic Helical Poly(phenylacetylene)	
10:50-11:15	Lecture 6	Prof. Yi Cao
	生物高分子材料力学：从微观到宏观	
11:15-11:40	Lecture 7	Prof. Huibin Qiu
	Functional Polymer Nanoarrays	
11:40-12:05	Lecture 8	Prof. Zhenjie Zhang
	智能晶态聚合物的可控合成和功能开发	

Session III: Prof. Wen-Bin Zhang

13:30-13:55	Lecture 9	Prof. Chao Zhong
	Living Materials Programmed by Life	
13:55-14:20	Lecture 10	Prof. Dayong Yang
	DNA 生物功能材料：组装与应用	
14:20-14:45	Lecture 11	Prof. Jinyao Liu
	Coated bacteria and their applications in enhanced therapy	
14:45-15:10	Lecture 12	Prof. Zhuojun Dai
	Versatile biomanufacturing through cell-material feedback	

Session IV: Chao Zhong

15:30-15:55	Lecture 13	Prof. Haifeng Ye
	REDMAP：新一代光遗传学工具的开发与应用	
15:55-16:20	Lecture 14	Prof. Chunbo Lou
	De novo Design and optimization orthogonal and modular cell-cell communication systems	
16:20-16:45	Lecture 15	Prof. Guoqiang Chen
	Next generation industrial biotechnology for PHA production	
16:45-17:00	Closing Remarks	Prof. Wen-Bin Zhang