《Shock Wave Physics and Application》授课预告

课程名称：Shock Wave Physics and Application
课程时间：2013 年 6 月 13 日~6 月 26 日
授课人：Prof. Rolf Prümmer
上课地点：爆炸科学与技术国家重点实验室二层会议室
课程安排：共 26 学时（含实验 2 学时），具体内容见课程表
主办单位：机电学院；爆炸科学与技术国家重点实验室

授课人简介：

Rolf Prümmer was born in 1937 in Ludwigsburg, Germany. He received a degree in Physics from the University of Stuttgart and began his dissertation at the Max Planck Institute of Stuttgart in 1964 which was completed in 1967 at the University of Karlsruhe, where he also completed his “Habilitationsschrift”, entitled “Explosive Compaction of Powdered Substances” in 1985, published in a book of the same title in 1987 by Springer Verlag. Professor Prümmer has been associated with several Fraunhofer Institutes. He has lectured at Tokyo Institute of Technology in Japan, in Novosibirsk, Russia, in Mongolia; and is now a professor at the University of Karlsruhe. He has published more than 150 papers and has developed more than 20 patents. The patent-related work has involved explosive welding, forming, cutting, hardening as well as extensive research dealing with explosive compaction of powders. Professor Prümmer has traveled and lectured extensively, and has interacted with colleagues world-wide.

欢迎老师同学们参加！

注：请感兴趣的同学发邮件到 zqpcgm@gmail.com，或发短信至 13426178398 报名参加（注明学号&姓名），以便我们及时调整，确保授课质量。

Shock Wave Physics and Application

Prof. Rolf Prümmer

课程 时间	星期一 6 月 10 日	星期二 6 月 11 日	星期三 6 月 12 日	星期四 6 月 13 日	星期五 6 月 14 日
上午： 9:00-11:00				1. Chemistry of Explosives, Rules for Handling	2. Formation of Shock Waves by High Velocity Collisions
下午： 14:30-16:30					3. Interaction of Shock Waves – Reflection and Focusing
课程 时间	**星期一 6 月 17 日**	**星期二 6 月 18 日**	**星期三 6 月 19 日**	**星期四 6 月 20 日**	**星期五 6 月 21 日**
上午： 9:00-11:00	4. Hugoniot Relations –Deduction and Graphic Interpretation	6. High Velocity Oblique Impact of Solids –Jetting Phenomena		*Experiment: Mach stem formation by a high voltage discharge	7. Parameter of Explosives: Pressure and Duration of Pressure
下午： 14:30-16:30	5. Oblique Interaction of Shock Waves – MACH STEM Formation				8. High Pressure Phase under Shock Wave Loading
课程 时间	**星期一 6 月 24 日**	**星期二 6 月 25 日**	**星期三 6 月 26 日**	**星期四 6 月 27 日**	**星期五 6 月 28 日**
上午： 9:00-11:00	9. Explosive Welding, Weldability Windows, Applications	11. Application I: Set-up for avoiding mach-stem in explosive compaction of cylindrical samples	12. Application II: Hot Explosive Compaction, Experience with Consolidation of Udimet 700-Superalloy		
下午： 14:30-16:30	10. Synthesis of Diamond, polycrystalline Diamond				