

立足科研的中国林科院

研究生教育

研究生部 林 群

2017年10月 北京



报告提纲

中国林科院概况

研究生教育现状

特色与优势



中国林业科学研究院成立于1958年，是国家林业局直属的综合性、多学科、社会公益型国家级科研机构。（林业科研的国家队！）

重点针对我国林业发展和生态建设中带有全局性、综合性、关键性和基础性的重大科技问题开展科技攻关。



历史沿革



1912年北洋政府农林部在北京天坛设立林艺试验场，
1913年设立林艺试验场西山造林苗圃。

1951年林垦部决定筹建中央林业实验所，
地址即为现在的中国林科院

1958年中国林业科学研究院正式成立



“三山五园”：万寿山、香山、玉泉山 颐和园、静宜园、静明园、畅春园和圆明园（植物园）

“三山五园”绿道示意图



22个所、中心

1. 林业研究所
2. 亚热带林业研究所
3. 热带林业研究所
4. 森林生态环境与保护研究所
5. 资源信息研究所
6. 资源昆虫研究所
7. 林业科技信息研究所
8. 木材工业研究所
9. 林产化学工业研究所
10. 国家林业局北京林业机械研究所
11. 国家林业局哈尔滨林业机械研究所
12. 林业新技术研究所
13. 热带林业实验中心
14. 亚热带林业实验中心
15. 沙漠林业实验中心
16. 华北林业实验中心

17. 国家林业局泡桐研究开发中心
18. 国家林业局桉树研究开发中心
19. 国家林业局竹子研究开发中心
20. 荒漠化研究所
21. 湿地研究所
22. 国家林业局盐碱地研究开发中心



联合共建机构

1. 黑龙江分院
2. 内蒙古分院
3. 新疆分院
4. 湖南分院
5. 海西分院
6. 湖北分院
7. 华北林业研究所
8. 高原生态研究所
9. 北京湿地中心
10. 浙江林业研究中心
11. 青藏高原生态林业研究中心
12. 榛子研究中心
13. 小陇山科技合作实验基地
14. 西峡科技兴林示范基地
15. 汪清试验示范基地
16. 民勤治沙综合试验站
17. 广元油橄榄品种试验园
18. 国家油茶科学中心北缘实验室
19. 种群生态模拟与控制实验室
20. 低山丘陵区生态修复重点实验室



人员队伍

- 全院在职职工2585人（科技人员1916人），
- （正、副）高级职称人员855人，拥有博士学位人员691人；
- 两院院士3人，国际木材科学院院士9人
- 国务院参事2人
- 获国家杰出青年科学基金4人
- 国家“万人计划”5人
- “国家级百千万人才工程”人选11人
- “全国杰出专业技术人才”5人
- 国家级、部级有突出贡献中青年专家40人，享受政府特殊津贴194人



两院院士

蒋有绪



唐守正



宋湛谦



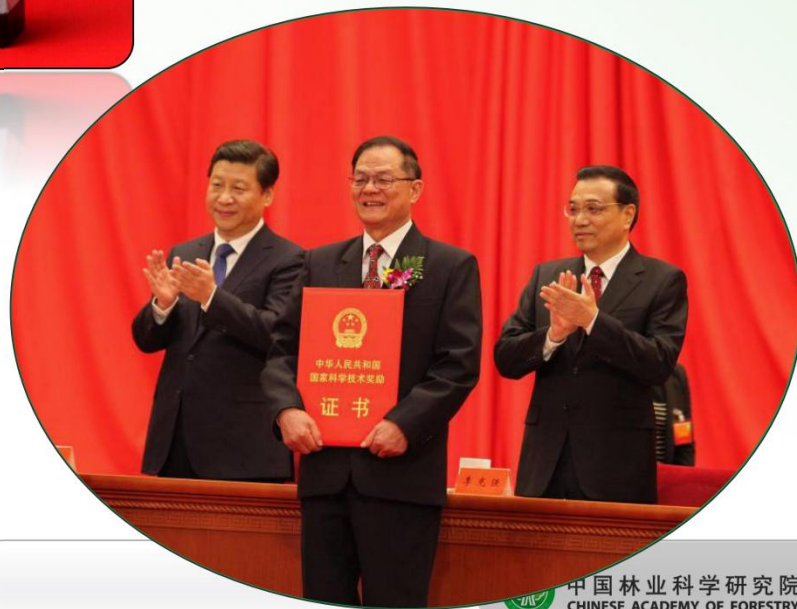
主要科研成果

中国林科院承担了林业行业**2/3**的国家重大项目，获得了林业行业**2/3**的科技进步奖和**全部**的国际合作奖。

建院以来，获国家科技进步**特等奖**1项，**一等奖**4项，**二等奖**40项；自然科学**二等奖**1项；科技发明**二等奖**3项。



ABT生根粉系列（王涛院士）荣获1996年度国家科技进步**特等奖**，在全国各地广泛推广，应用植物达1133种



国际合作

我院已与世界上56个国家和50个国际组织开展了多渠道、多层次、多形式、全方位的国际合作与交流，与世界各国知名林业科研机构、大学、林业企业和政府部门以及国际组织签署了50多个科技合作协议。



2009年4月，我院正式加入欧亚太平洋大学联盟。



报告提纲

中国林科院概况

研究生教育现状

特色与优势



中国林科院学位与研究生教育开始于1979年，是国家首批硕士、博士学位授予单位之一。经过30多年的发展，尤其是2002年成立研究生院以来，研究生教育在办学条件、学科建设、师资队伍、研究生规模等方面都得到了快速发展。



学科建设

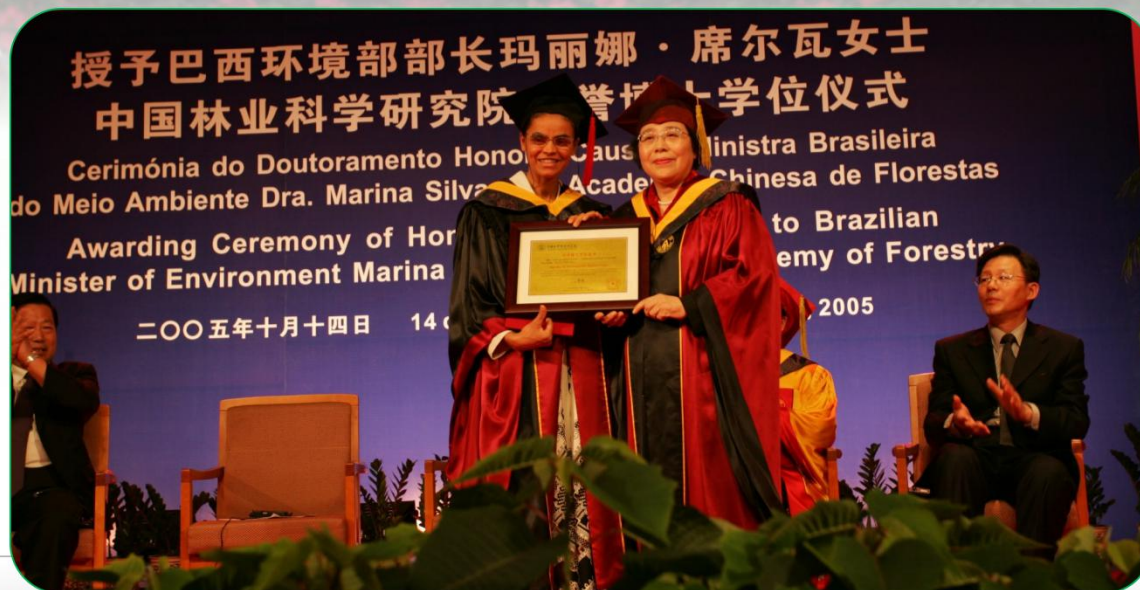
- 拥有学位授予权的学科专业，分布在农学、理学、工学、管理学等4个学科门类
- 全院共有一级学科博士点3个，二级学科博士点20个
- 一级学科硕士7个，二级学科硕士点34个
- 硕士专业学位授权点2个
- 4个国家林业局重点学科：林学、林业工程、生态学、农林经济管理
- 1个北京市重点学科：森林培育学



- 全院在读各类研究生1300多人
- 全日制博士研究生400多人
- 全日制硕士研究生600多人
- 已毕业研究生4000多人



授予外国政要名誉博士学位



□ 迎新晚会、元旦晚会、歌手大赛



□ 篮球赛、乒乓球赛、羽毛球、局运动会等



□ 班级集体活动、支部主题党日活动



□ 研究生会、青年志愿者协会活动



报告提纲

中国林科院概况

研究生教育现状

特色与优势



主要特点

- 我院与其他大部分归口教育部管理的高校不同，归口国家林业局管理
- 仅提供硕士和博士研究生教育，不设本科
- 我院研究生教育的主要特点是立足科研、注重实践、着眼应用
- 在学科设置和培养方案上注重产学研深度融合，以培养专业型、应用型科技创新人才为主



优势一：科研资源丰富，学生有机会参与各类重大项目，学以致用、提升能力、开阔眼界

□ “十一五”以来，我院承担了林业行业

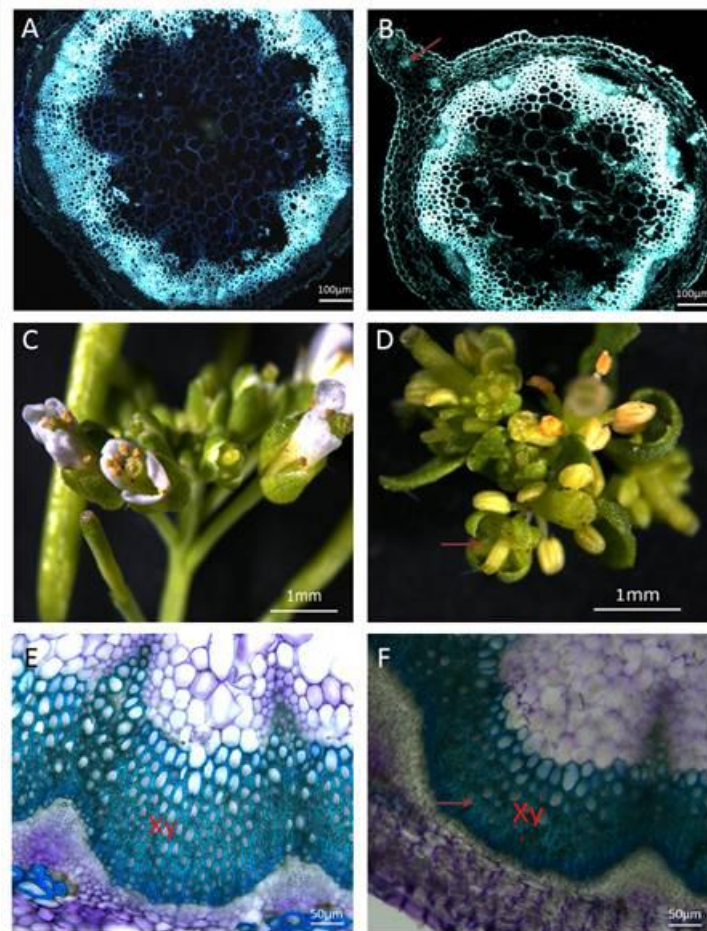
70%的国家重大科技项目

□ 973计划项目

□ 科技基础性工作专项项目

□ 国家重点研发专项项目

这些项目需要跨学科、跨部门实施，为学生参与科研开发实践、汲取多学科知识并提升综合能力提供了丰富的资源。



优势二：科研平台完善，可满足研究生多方面学习需求

- 我院拥有**12个**国家/局级重点实验室，包括：**林业系统唯一**的一个国家重点实验室（林木遗传育种）
- **21个**国家/局级野外观测台站
- **12个**国家/局级工程（技术）研究中心
- **7个**依托我院的国家质量监督检验机构



优势二：科研平台完善，可满足研究生多方面学习需求

- 8个植物、动物、昆虫、木材标本馆
- 10个种质资源库
- 6个部级自然保护区
- 4个国家级林业试验基地及各类试验基地共计100万亩



优势二：科研平台完善，可满足研究生多方面学习需求

有亚洲最大的林业图书文献资料库，藏书40万册，有中外文期刊1200多种；主办中英文林业科技期刊23种。

The screenshot shows the homepage of the China Forestry Information Network. At the top, there is a logo and the text "中国林业信息网 www.lknet.ac.cn" and "中国林业科学研究院图书馆". Below this is a navigation bar with links: "2015年4月10日 星期五 | 网站首页 | 图书馆主页 | 馆藏书目查询 | 联合目录 | 外文期刊导航 | 林业核心期刊 | 学位论文检索". The main content area is divided into two columns. The left column is titled "林业数字资源导航" and lists various digital resources with their respective counts: "重庆维普学术期刊全文库 (2000多万篇)", "中国知网--CNKI 系列数据库 (4库2000多万篇)", "万方数据博硕士论文全文库 (6库200多万篇)", "书生之家电子书全文库 (5万本)", "apabi数字图书全文资源库 (32种年鉴共412 卷)", "超星电子书全文资源库 (80375种)", "中国大百科全书网络版 (共收条目78203条)", and "图书馆北书资料管理系统 (共收光盘1000多张)". The right column is titled "统一检索" and "林业发现" and contains a search bar with options for "全部", "标题", "作者", "刊名", and "关键词". Below the search bar, there are tabs for "最新外刊", "捐赠图书", "培训课件", and "资源导航". The "最新外刊" tab is selected, showing a list of recent foreign journals: "Physiologia Plantarum 2015 Vol. 153 No. 3", "Physiologia Plantarum 2015 Vol. 153 No. 1", "Pine Chemicals Review 2015 Vol. 125 No. 1", and "Journal of Forestry 2015 Vol. 113 No. 1".



优势三：国际合作蓬勃发展，为研究生拓展国际视野创造条件

- 与50多个国外科研机构和国际组织签署了科技合作协议，其中包含联合培养研究生内容
- 承担众多国际合作项目，通过项目实施加强研究生的国际化培养
- 通过国际合作创新团队、引智项目等人才引进交流项目，邀请国外知名专家为研究生讲学，扩充研究生的国际视野



OUTSTANDING DOCTORAL RESEARCH AWARD WINNERS 2010



Guillermo Gea Izquierdo, carried out his Ph.D. studies between January 2004 and June 2008 at CIFOR-INIA in Madrid, Spain, and the University of Berkeley, California, USA. In addition, he also completed a Master's of Science in Range Management in Berkeley. Dr. Gea Izquierdo's research work is related to modelling agroforestry systems in

Mediterranean ecosystems. There is a lack of models to manage these ecosystems sustainably, among other reasons is the secondary importance of wood compared to other non-timber products such as fruit production or raising livestock. There is a need to understand ecosystem functioning in a global change scenario, as well as the ecological and economic importance of these drought stressed ecosystems. Therefore, the research presented here analyses the role of trees in the ecosystem from different perspectives, modelling several aspects of tree growth and tree ecology. One of the most important species in the Mediterranean region was used to this effect, a species that might become more important if climate warming continues, i.e. *Quercus ilex*, an evergreen broadleaf which coincides with the area occupied by the driest morphotype. The absence of tree-ring studies for this species is mostly a consequence of the difficulty in distinguishing its annual rings. Dr. Gea Izquierdo's research is considered to have pioneering for a better understanding of this ecosystem and the species in order to increase its sustainability.



Marieka Gryzenhout received her Ph.D. in microbiology from the University of Pretoria, South Africa, in 2006. In the short period since then, she has established herself as a world leader in the field of forest mycology and forest pathology. The focus of her research has been to unravel the confused status of some of the world's most important pathogens residing in the

family Cryphonectriaceae, a family that she was responsible for describing. While the family includes the devastating chestnut blight pathogen *Cryphonectria parasitica*, she has shown that there are many other serious pathogens in the group. Most of these were unknown to Science prior to her studies. Her Doctoral dissertation gave rise to 11 publications in top mycological journals, and an authoritative book on the Cryphonectriaceae published in the USA in 2009. She has also been deeply involved in mentoring an impressive number of students interested in forest pathology and has published widely with them.



Jiali Jiang completed her Ph.D. in wood science and technology at the Chinese Academy of Forestry (CAF) in 2009. As a Ph.D. candidate, Dr. Jiang systematically investigated the dynamic viscoelastic properties of wood. She made the intriguing discovery that the occurrence of mechanical relaxation processes is the main mechanism which causes the narrowing of the linear viscoelastic region. This work was accepted for publication in the highly prestigious *Canadian Journal of Forest Research*. In addition, seven other papers

from her dissertation were published or accepted in top-level journals in the field, such as *Wood and Fiber Science*, *Forest Products Journal*, *Drying Technology*, etc. Her paper won the first prize for the outstanding paper in 2006 in the national Ph.D. candidates' academic competition held by the Ministry of Education, China. She participated in national level research projects and to carry out cooperative projects several times during her program.



Finnvid Prescher is in the top half of the Swedish seed other seed related functions some aspects of the overall of Svenska Skogsplantor, about one third of all forest Sweden. Dr. Prescher completed doctoral studies at the Forest Genetics and Plant

Umea Plant Science Centre, Swedish University Sciences. His main supervisor was Professor. His studies from 2004 to 2007 were carried out on a basis, while he maintained his usual duties within Swedish forestry. The research work discusses 11 studies developing models and evaluating real data to improve seed orchard management in *P. L.* and *Picea abies* (L.) Karst. This body of work contribution to the improved establishment and of seed orchards through an excellent interaction science and application and is an example of working foresters can do outstanding science give in their applied career.



Andreas Schindlbacher completed his doctoral research work at the University of Natural Resources and Sciences at Vienna, Austria. He has been engaged in forest ecology and in laboratory research since he completed his education in biology at the University of Vienna. Dr. Schindlbacher recognized the relevance of soil processes in the climate change

debate, considering that soils represent large pools of carbon and nitrogen and that both elements can form strong greenhouse gases (GHG, CO₂, N₂O). The soil models available at the beginning of his career had a considerable uncertainty on the effects of soil warming on GHG emissions. He designed elaborate laboratory and field experiments to scrutinize the conceptual understanding of the effects of soil warming. For his field research he chose a particularly difficult field site in the Austrian mountains and implemented and maintained a complex soil warming experiment. The installation is still effectively used. The results were published in renowned journals. The diversity of experiments and the development of new techniques in field and laboratory research derived from the experimental challenges are of particular impact.



Jiali Jiang completed her Ph.D. in wood science and technology at the Chinese Academy of Forestry (CAF) in 2009. As a Ph.D. candidate, Dr. Jiang systematically investigated the dynamic viscoelastic properties of wood. She made the intriguing discovery that the occurrence of mechanical relaxation processes is the main mechanism which causes the narrowing of the linear viscoelastic region. This work was accepted for publication in the highly prestigious *Canadian Journal of Forest Research*. In addition, seven other papers

2010年在韩国举行的第23届国际林联世界大会上，我院蒋佳荔博士获得杰出博士研究奖，这是中国林业院校自主培养的博士研究生首次获此殊荣

中国林科院加强与中东欧合作



**2007年，我院与斯洛伐克国际林业中心
签署了合作谅解备忘录**



中国林科院加强与中东欧合作



我院专家从匈牙利Silvanus集团公司引进了
Turbo-Obelisk刺槐品种



中国林科院加强与中东欧合作



经我院推荐，罗马尼亚布拉索夫特兰西瓦尼亚大学校长伊万·阿布鲁丹教授荣获**2016年**中国政府“**友谊奖**”（**2016年6月**，张守攻院长率团出访罗马尼亚时，与该校签署了合作谅解备忘录）



加强与中东欧教育合作的建议

- 与中东欧国家的高校开展联合培养硕士和博士研究生
- 邀请中东欧国家的相关林业专家来我院给研究生授课或开设专题讲座
- 选派我院相关教师到中东欧国家的高校访学



汇报结束！ 谢谢！

