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## 张寅超

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【关闭】



Zhang Yinchao, male, was born in August 1961 in Zhejiang.Graduated in July 1982 with the Bachelor of Science from Hangzhou University, obtained a Ph.D. in October 1993 from Anhui Institute of Optics and Fine Mechanics, Academia, China, and finished his work as a post-Doc at the Max-Planck-In-stitute for Chemistry, Germany. Now he works as a professor at Anhui Institute of Optics and Fine Mechanics, Academia, China.

From September 1984 to July 1995 he worked on absorption spectra of atmospheric gas molecules, and finished some excellent works, for example (1) calculations of N2-broadening coefficient of water vapor line based on QFT and ATC theories respectively, including short range, dip-ole(H2O)-quadrupole(N2), and quadrupole(H2O)-quadrupole(N2) interactions, (2) a nonlinear least-squares fitting program for extracting the line parameters from measured spectra (the line shape is assumed to be a Voigt profile or a hard-collisi-on profile of Rautian and sobel' man), (3) a fitting program of observed energy levels to the Watson's Hamiltonian

constants of water vapor vibration-rotation states, (4) a nonlinear least-squares fitting program used in line overlapping region for extracting the line parameters from measured spectra (the line shape is assumed to be a improved Voigt profile). In 1994 he became the leader of the High-Resolution Absorption Spectroscopy Group. From November 1995 to October 1997 he worked with the development and application of a airborne heated gold converter/ chemiluinescence detector system for continuous measurements of the atmosphric concentration of total reactive nitrogen in the upper troposphere and the low stratosphere at the Max-Planck-Institute for Chemistry, Germany, and actively took part in several field campaigns in Shannon(Ireland, Kiruna(Sweden), and Tenerife (Canary Islands) as part of the European Commission funded projects STREAM and ACE-2. During this time he demonstrated great skills in adapting his background as a physicist to the practical problems of applying state of the art measurement methods to the study of the chemistry of the atmosphere and showed his ability to produce excellent work under difficult conditions.

Since November 1997 Dr. Zhang begun to work with lidars for measurements of air pollutants: NO2, SO2, O3, NO, toluene, benzene, aerosols, and CO2.Dr. Zhang carried out several projects from national 863 plan, the Chinese Academy of Sciences,

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## 个人介绍

张寅超,男,1961年出生,大气光学专业,博士后,博士生导师,研究员。1984年-1987年主要从事大气分子的高分辨 率光谱理论研究工作,1987年-1995年在国家863计划重点课题"大气分子吸收特性研究"课题中承担理论研究任务、并作为主要实 验研究人员进行了大量科学研究工作,其理论研究和实验研究工作成果处世界前沿地位。1994年11月-1995年7月为国家863计划 重点课题"大气分子吸收特性研究"课题组组长; 1995年7月-1997年10月于德国马普化学所,在诺贝尔奖获得者Paul Crutzen 博 士指导下从事机载NOy测量系统的改进研制,及参加野外飞机测量研究工作,该项研究是该领域国际最高水平的研究工作之一。 回国后承担863计划信息获取与处理技术主题重点项目"S02和飘尘探测激光雷达实验样机研制"和中科院重大项目"车载测污激光 雷达及测量研究",项目已按合同要求全面完成,完成情况得到主题专家组,及科技部、中国科学院、国家环保总局等部门领导 和专家的高度评价。

目前主要进行大气污染监测技术的研究与开发工作,如大气NO2、SO2、O3、NO、甲苯、苯、沙尘暴、和 CO2的激光雷 达监测技术,并且承担了国家863计划项目"实用型车载测污激光雷达关键技术"。

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