

温斯顿 世界能源革命

WINSTON "CHINA POWER"



英才档案

他祖籍广东梅州大埔茶阳镇，出身于广东湛江市，他是世界上第二个独家被授权许可生产稀土锂动力电池的中国人；

他与团队参与组建「国家863计划锂动力电池研究开发中心」，成功研发出我国乃是全球第一辆稀土锂动力电池电动客车在首都天安门前行驶，圆了几代电车人的梦想，受到国家领导人的特别嘉奖；

他在深圳的稀土锂动力电池生产工厂，产品畅销170多个国家和地区，世界著名的评估

机构评估该成果高达1100亿美元；全球顶尖的美国AIG和AXA保险公司在全球范围内为其产品承担产品责任保险。

早在2003年，他领导温斯顿新能源集团参与在美国建有两个动力电池研发中心及一个等离子体脉冲能实验室。他参与的人体生命源原理从稀土锂钪，向稀土锂硫，到硅量子可充电电池的材料科研、试生产研发，在世界能源革命中凸显了「中国力量」。

的中国力量

OF GLOBAL ENERGY REVOLUTION

總經理 鍾旭航
溫斯頓新能源集團有限公司

主角身份

溫斯頓新能源集團有限公司 董事總經理 鍾旭航

焦點事件

“溫斯頓公司”與香港“百德國際”公司强强聯合，
推動國產清潔能源交通迅速向產業化邁進

舉薦理由

他是世界上第二個能制造稀土鋰動力電池的中國人；
他參與稀土鋰動力電池的研發，解決電動車充電難題
的瓶頸，領先世界同類產品約20年



环境污染、石油紧缺、油价暴涨给当今世界经济发展蒙上阴影，能源危机已成为制约人类文明前进的绊脚石，寻求可再生清洁能源成为人类紧迫的任务。

Environmental pollution, shortage of oil, raising price of oil have cast a shadow over the world economic development, the energy crisis has become a stumbling block to progress of human civilization, of which has become our urgent task to seek renewable clean energy.

新能源革命的「指路牌」 THE NEW ENERGY REVOLUTION "GUIDEPOST"

据联合国的统计数据，目前世界拥有8亿辆汽车，一年要喝掉350亿桶石油，占世界石油消耗的82%，石油危机的爆发，使世界各国不得不开始考虑寻找替代石油的其它能源。

在探索解决能源和环境双重危机的过程中，一些发达国家开始将发展电动汽车作为燃油车的替代产品来研究，尤其是近年来，世界电动汽车的研究和应用成为汽车工业的一个「热点」，世界各大汽车巨头对此投入重金研发。美国通用公司每年为此投入7亿美元，而克莱斯勒公司更是投入高达5亿欧元。最近2年，世界冒出的电动车企业有美国特斯拉；日本丰田，日产；韩国的现代大羽；我国的江淮，奇瑞，比亚迪。但他们均是常规电钻工具小电池做动力源，这些所谓电动车永远无法解决在1个小时充电，可续行300公里的事实。

According to UN statistics, at present, the world has 800 million vehicles, which consume 35 billion barrels of oil a year, accounting for 82% of the world's oil consumption. The oil crisis leads to a thinking about looking for other energy sources as alternatives to oil.

In the exploration process to solve the problem of the energy and environment crisis, some developed countries start to develop electric vehicles as a fuel car alternative. Especially in recent years, the research and application of the electric car become a hot spot in the automobile industry with the world's big carmakers spending great effort on research and development. GM invests \$700 million a year in the United States, while Chrysler 500 million euros. In recent two years, new EV makers in the world are Tesla, Toyota, Nissan, Hyundai Oba, Jianghuai, Chery, BYD and etc. But they use small batteries, so having the problem about battery charge. It is hoped that the mileage can be up 300km after 1 hour of charge.

能真正商业化的电动车，唯一要突破技术瓶颈是：电池的安全性，充电的30分钟适应性，续航里程大于或等于500公里特性。这三项性能指标是2020年前可发展的电动车产业的最基本技术条件。锺旭航院士预测，2021年以后人类的清洁能源交通是不需要充电的绿色动力源交通。未来的交通时代是属于不需要充电的绿色能源交通的时代。

目前电动汽车要取代燃油汽车，动力电池是关键，由于传统化学电池存在着储存能量低、重量大、寿命短充电难和不安全等因素，成为电动汽车产业化发展的「瓶颈」。

稀土锂动力电池是世界公认的新一代可充电电池。锂是一种最轻的银白色金属元素，十分柔软，化学性能活泼，吸附性很强的金属，是做电池最好的材料。最早用锂材料做成锂电池的是美国贝尔实验室，最先实现商业化的是日本索尼。目前投入商业使用的有液态锂离子电池和固态锂聚合物电池。因液态锂离子电池的安全性差，固态锂聚合物电池生产工艺复杂，价格昂贵无法商业化而搁置。加上这类锂离子电池因解决不了快速充电和易燃易爆的固有特性，至今无法做出动力类电池。

锺旭航生产的生命源稀土锂动力电池（本文简称温斯顿动力电池），突破了液态锂离子电池和固态锂聚合物电池的复杂工艺及安全性能的不足，实现了人类首个采用水性粘结剂的革命性的进步，具有安全、能量高、工作度适应范围广、可回收再生等优点，该技术采用廉价材料，制作成本低，流程简洁，容易产业化等，可广泛用于工业、民用及军事的各个领域。

温斯顿动力电池的发明，打破了日本在世界上的垄断。随即，欧美各国的专家闻讯也接踵而至，了解情况，寻求合作，欧美专家认为，温斯顿稀土锂动力电池技术水平领先世界同类产品约20年。



Really commercial EV should break through technical bottlenecks so as to get battery safety, adaptability in 30m of charge, mileage of greater than or equal to 500 km. These three performance indicators will be the most basic technical conditions to the development of the electric vehicle industry by 2020. Zhong Xuhang academician believes that, after 2021, clean energy traffic is not to need for any battery charge. In the future, it will be a real green energy transport.

At present the key for the electric car to replace the fuel vehicle is the power battery. However, the traditional chemical battery having advantages such as low stored energy, large weight, short life, low safety and charging difficulty the like is the bottleneck of EV industrialization development.

Rare earth lithium-ion power battery in the the world is recognized as a new generation of rechargeable batteries. Lithium is one of the most light silver-white metal element, very soft, lively chemical, strongly absorptive, so the best material for batteries. Bell Lab is the first to prepare lithium-ion batteries, and SONY is the first to commercialize them. Currently in commercial use, liquid lithium ion battery and solid state lithium polymer battery are present. Poor safety in the liquid lithium ion battery, and complex processes in the solid state lithium polymer battery. Both of them are expensive, so are not yet to commercialize. Other shortcomings are as follows: a fast charging being not available; flammable and explosive as the intrinsic characteristics. Life source rare earth lithium-ion power battery produced by Mr. Zhong (referred to as Winston power battery in this article) can overcome the above-said shortcomings. This kind of battery adopts a water-borne binder and has a lot of advantages: high safety, high energy, a wide range of uses, recycling, and low price and cost, concise process, and easy mass production. It can be widely used in industrial, civil and military fields.

Winston power battery can break the monopoly of Japan in the world. Then, European and American countries experts come to it for a understanding and seeking the cooperation. These experts believe that the technical level of this battery is at a leading position in the world (ahead of about 20 years).



国家科技部将稀土锂动力电池技术确定为国家重大科技成果，为加快这一技术成果的产业化，锺的公司自行设计了稀土锂动力电池生产线，进行了批量生产，产品大部分出口到欧美等国家，并提供给国内包括电动车、船及军用等多个科研项目使用。

目前，锺总生产的稀土锂动力电池具有世界26个国家的知识产权，产品畅销170多个国家和地区。从2003年始，美国国际集团（AIG）成员全球顶尖的美国美亚保险公司及AXA保险公司在全球范围内为稀土锂动力电池产品承担产品责任保险，全球任何一个购买锺旭航公司生产的电池的客户将会有强大的AIG和AXA保险公司为其利益提供保障，这意味着温斯顿电池是安全的，购买温斯顿电池也是安全的。

温斯顿锂动力电池的发明和成功的市场应用，为人类寻找可再生能源找到了「指路牌」，给渴望在更安全环境和更清洁空气中生活的人们带来了福音。

The authorities in China has identified the rare earth lithium-ion power battery technology as one of national major scientific and technological achievements. In order to speed up the industrialization of this technology, Mr. Zhong has designed the rare earth lithium-ion power battery production line for a mass production. Most products are exported to Europe and the United States and other countries, and are used in a number of technical research projects, for example, electric cars, ships, military apparatuses etc.

At present, Mr. Zhong has IP rights of rare earth lithium-ion power battery with 26 countries. His products sell well in more than 170 countries and regions. Beginning from 2003, AXA and so forth as members of AIG have provided product liability insurance worldwide for rare earth lithium-ion power battery. This means that Winston battery is safe. So, this kind of battery is popular.

Winston lithium power battery successfully used may be a beacon in the exploration of the renewable energy, and brings the Gospel for humans who desire a safer environment and clean air.





开启电车文明的「新纪元」

TO START THE "NEW ERA" OF THE CIVILIZATION OF ELECTRIC VEHICLE

据《中国环境报》报道，早2001年的北京国际清洁能源技术研讨及展览会上，一辆在首都天安门前行驶的我国首辆稀土锂动力电池的电动客车成为媒体关注焦点，这辆命名为“温斯顿-EV3”的电动中巴车，以稀土锂动力电池作为动力源，最高时速达110 km/h，一次充电只需一个半小时，可连续行驶400公里，电池的使用寿命可达到100万公里以上。这辆温斯顿牌稀土锂动力电池就是当年温斯顿新能源集团有限公司钟旭航亲手制造的。

100多年前，人类工业文明创新有两大亮点：一是电力的发明和广泛应用，另一则是石油的发现和广泛应用。同时，交通工具也面临两种选择：「轮子」与「电力」结合发明电车，「轮子」与「石油」结合创新汽车。非常遗憾，历史选择了后者，电动车黯然神伤，退出历史舞台，留下百年的痛。

The China Environment News reported that, early in 2001, an international clean technology seminar and exhibition was held. In this, Winston EV3 minibus attracted the attention from the media. It used rare earth lithium-ion power battery as a power source, had a top speed of 110 km/h and a mileage of 400km after only 1.5 hours of charge as well as a battery life of more than 1 million km. This EV3 was made by Mr. Zhong from Winston New Energy Group Co., Ltd.

More than 100 years ago, innovation in the industrial civilization had two highlights: one is electric power, and another is petrol oil. At the same time, the transportation faced two choices: electric cars and fuel cars. The history chose the latter, and electric cars dejected, leaving one hundred years of pain.

Cars change the world. While promoting the economic development and social progress, it contributes to natural and social contradictions. Cars consume non-renewable oil and cause pollution, damaging the health of the human beings and

汽车，这个改变世界的「自由机器」，在促进世界经济发展和社会进步的同时，也加剧了自然矛盾与社会矛盾，汽车消耗地球不可再生的石油和污染人类赖以生存的大气，既损害了现代人的健康，又牺牲了几代子孙的利益。如今，「油荒」四起，已预警着汽车文明大势已去，石油危机和大气污染迫使人类迷途知返，抛弃汽车文明而创新电车文明。

100多年后的今天，当锺旭航重新将「轮子」与「电力」创新结合起来，并开着世界上第一辆装备稀土锂动力电池的电动汽车，在深圳特区的大街小巷行驶时，国人为之振奋了，世界为之震惊了。

在深圳光明新区公明镇李松朗工业区的温斯顿工业园，记者登上了温斯顿牌锂动力电池装备的小轿车、中巴车、公交车、吉普车、豪华房车……坐者不觉，站者不惊，感觉非常平稳，几乎没有燃油车启动时那种「前俯后仰」的神态和表情。记者发现车内根本就没有内燃发动机，也无需汽油，一切能源都由安装在大巴底盘上的动力电池提供，无噪音、无排放、无污染，是当之无愧的「绿色环保客车」。

据了解，2004年10月，在上海举行的「必比登国际电动车挑战赛」上，温斯顿公司的「EV6700」豪华电动商务车和豪华大客车以最高时速、长距离行驶等性能分别夺得全球同类车型的第一名。温斯顿公司研制的「2000W」电动摩托车以80km/h时速，在100公里赛道上夺得全球同类车型的第一名。经过十几年的潜心研究，温斯顿用实力向世人证明自己在稀土锂动力电池领域的专业实力。



永遠不用充電的清潔能源 VIP 中巴



the earth's atmosphere. Now, the shortage of oil shows that the fuel cars have a dim future. Oil crisis and atmospheric pollution enable us to abandon fuel cars and develop electric cars.

Today, more than 100 years later, Mr. Zhong combines the wheel and the electric power to release the electric car that uses rare earth lithium-ion power battery. When it runs in the streets of Shenzhen, this shocks the world.

In Winston Industrial Park at Li Songlang, Gongming Town, Shenzhen, the reporter boarded a variety of cars equipped with Winston brand lithium power battery: sedans, minibuses, buses, jeeps, luxury RVs and so forth. Passengers standing had a steady feeling, not like fuel cars when they were started. The reporter did not find any internal combustion engine or any gasoline. All energy was provided by the power battery installed on the bus chassis, so no noise, no emissions, no pollution. They are really green cars.

It is learned that, in October 2004, in Shanghai International EV Challenge, Winston EV6700 as a luxury electric commercial vehicle was ranked No.1 due to its top speed and long driving distance. And so was Winston 2000W Electric Motorcycle in the 100km race due to 80 km/h speed. After years of painstaking research, Winston shows to the world that it can do a good job in the field of rare earth lithium-ion power battery.



永遠不用充電的清潔能源VIP 大巴



国产清洁能源交通的「里程碑」

THE "MILESTONE" OF DOMESTIC CLEAN ENERGY TRANSPORT

迄今为止世界上能够制造汽车用稀土锂动力电池的只有温斯顿一家。

目前，中国汽车的年产能超过一千万辆，保有量已经近两亿多辆，汽车消耗的石油已经占中国石油消耗总量的190%，到2020年中国汽车对石油的消耗将达到中国油耗的250%，到2030年中国汽车对石油的消耗将达到中国油耗的300%，能源危机形势非常严峻。

锺正在带领温斯顿新能源集团在全球的科研团队，为解决快速充电或不用充电的清洁能源绿色交通产业化努力拼搏。

锺旭航告诉记者，2015年将完成永不充电的电动车上路。在温斯顿集团的深圳电池工厂里，记者看到一辆VIP中巴和VIP大巴正在安装电池，电池分两类，一类专门作主驱动电动机的，称牵引力动力稀土锂电池（中巴一组710公斤，大巴一组重1300公斤）；另一类电池专门给稀土锂电池组充电的电池，称常态燃料补给电池，（规格重130公斤）。这种清洁能源中巴、大巴，只要出厂首次充满电就能长年行驶，永不再充电。记者问续行中消耗的能源哪里来？锺笑着指车上的重约11公斤的燃料罐说：「这中巴、大巴就依靠自带的由碳纤维制造的稀土燃料罐，每

So far, Winston is only one in the world to make cars equipped with rare earth lithium-ion power battery.

At present, the annual production capacity is more than ten million cars in China. China possesses nearly more than two hundred million cars. Automobile oil has accounted for 190% of China's total oil consumed; by 2020, 250%; by 2030, 300%. Thus, the situation is very serious in energy crisis.

Mr. Zhong is leading his global research team to work hard in solving the problem of the battery charge (quick or not used).

Mr. Zhong says that he will develop the EV that never requires any battery charge. In his battery plant of Shenzhen, the reporter saw the staff were installing batteries in the VIP minibus. The battery is divided into two classes, a kind of battery used specially for a driving of motors (called as the traction type power rare earth lithium-ion battery; a group of batteries in the minibus weighing 710 kilograms, and this minibus weighing 1300 kg). Another kind of battery is called as a normal fuel type battery (weighing 130 kg). This battery will never require any charge, while the car can run for a long time. The reporter asked: where was the energy for mileage from? Mr. Zhong answered, "The car has its RE fuel tank consisted of carbon fiber. Each tank of RE fuel can charge the RE power battery, so letting the car drive 500km. We now have two prototype cars. After the car drives 1000km, a

罐稀土燃料能给稀土动力电池充电续行500公里，因为这两辆是样车，只设计每车一个罐。今后小车、中巴、大巴均设计安装三个罐，当车子行驶1000公里后再换上装有稀土燃料罐便反复行驶，永远省去建充电桩、充电站给电动车再充电的麻烦了」。

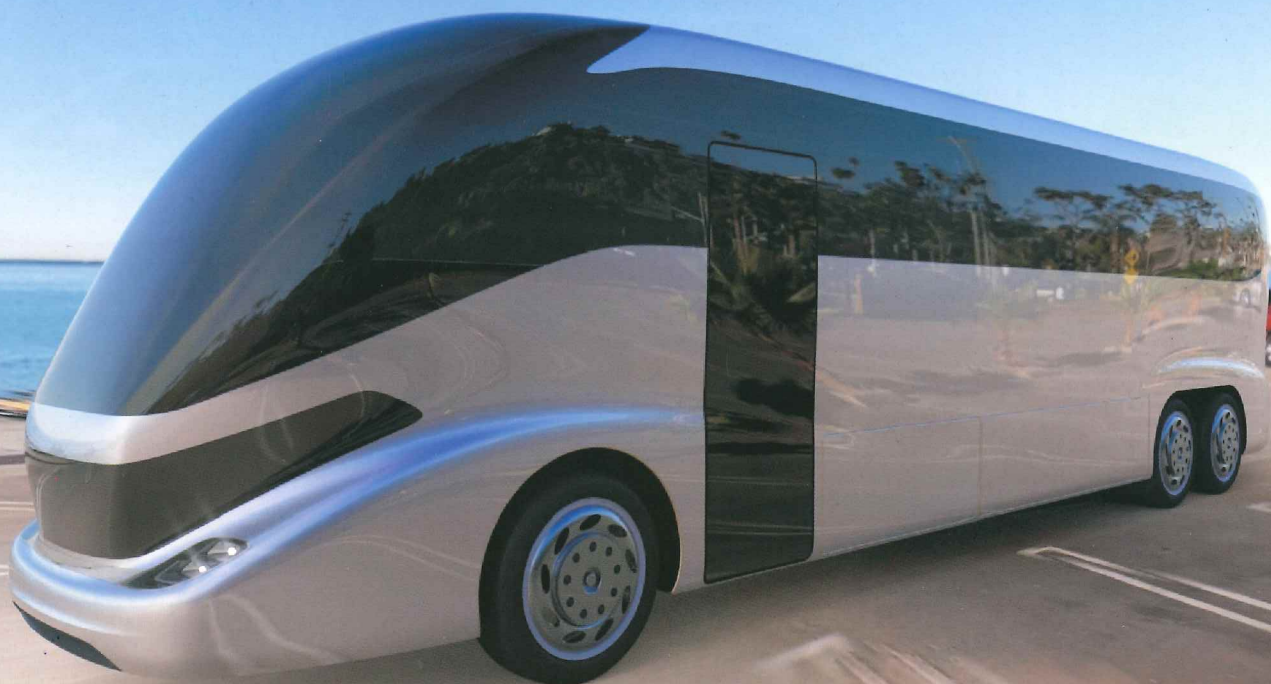
据温斯顿集团与香港的上市公司「百德国际」的合作公告，我们得知「百德国际」正全面收购温斯顿在深圳的全部产业，这个计划的成功对加快实现深港清洁能源公共交通，进而在全国奏响稀土锂动力电池及永不需充电的电动车产业化的前奏曲，对减少我国对国际能源市场的过分依赖，保障能源安全，改善人类的生存环境，减少因不可再生能源的枯竭对人类生存和发展的制约，具有重大的经济和战略意义，这「里程碑」式的标志性事件，凸显了中国在世界新能源革命中的「大国力量」，必将把人类行走文化提升到一个新的高度，推进到一个新的阶段。

new RE fuel tank will replace old one, so forever saving the trouble of constructing charge stations or piles."

According to the announcement from Winston and Best as a listed company in Hong Kong, we know that Best is planning to buy all the business of Winston in Shenzhen. This plan will speed up the implementation of clean energy public transportation in Shenzhen and Hong Kong, be a prelude for the industrialization of the RE lithium power battery and the EV (which will never need battery charge), and reduce reliance on the international energy market in China. Moreover, this plan can ensure energy security, improve the environment for human survival, reduce the restrictions due to depletion of non-renewable energy for human survival and development, so having important economic and strategic significance. This is a landmark and highlights the fact that China will be a powerhouse in the new energy revolution. Therefore, the human culture will certainly be promoted in transportation and travel to a new level or stage.



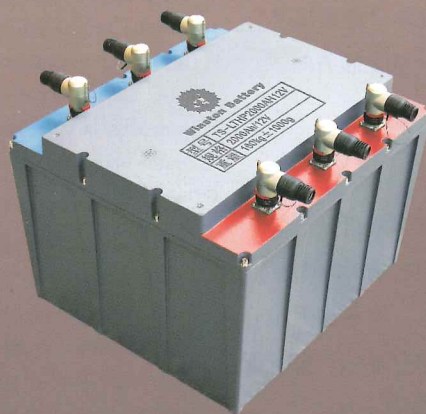
美國加州大學溫斯頓全球能源研究開發中心



豪华旅游VIP大巴 LUXURY TOURISM VIP BUS

2014年，美国著名设计公司设计制造并命名为“中国梦”的豪华旅游VIP大巴，采用温斯顿第三代稀土锂动力电池，总功率为1100KWH，一次充电续航里程810英里，最高时速90英里，最大爬坡度为25%，创目前全球纯电动绿色长途旅游巴士技术、性能指标之最。

China Dream Luxury Tourism VIP Bus designed by a famous design firm in the United States in 2014 adopts Winston G-3 lithium power batteries, Total power is 1100kwh. Mileage is 810miles after a full charge. Max speed is 90miles, Max slope is 25%. This bus breaks a record as tech and performance indicators in the field of long-distance tourism buses environmentally friendly in the world.



WB-LTHP2000AH12V