THE GREAT ACHIEVEMENTS OF FIRE ELECTRIC ENGINEERING IN TWENTIETH CENTURY

COMPELIER : J.L.YANG (CHINA)

20世纪火电工程的重大成绩

杨家禄 编著

技出版社
SCIENCE & TECHNOLOGY PUBLISHING HOUSE

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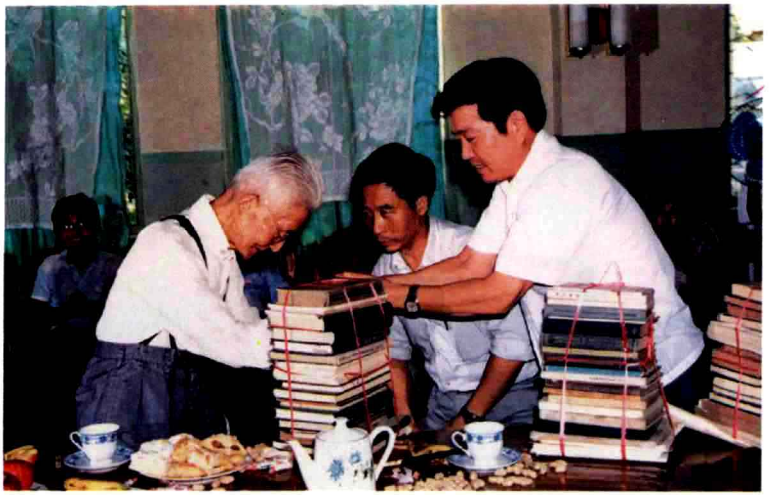
▲作者杨家禄近照

Compiler & Author high engineer. Yang Jialu.

▲杨家禄在修改书稿

Mr.J.L. Yang was coriting book.



▲1986 年杨家禄从广州来贵阳定居，向广州氮肥厂献赠他珍藏的电力书籍。

Ceremony of contribute his elec. rare books to fhe GZNF factory before he settle down to Guiyang in 1986.

▲1997 年，广州氮肥厂政治部主任梁达平专程来慰问并采访杨家禄。

Avspecial trip to Guiyang for salutation & information to him by Liang Daping, the director of political Dept. GZNF factory in 1997.

▲1958 年冬武汉电业管理局合影，前列右一为杨家禄。

At The right headfirst row in a group photo of wuhan elec. Bureau.1958, winter.

▲1949 年 8 月杨家禄在广州西村发电所门口。

At the gate of Guangzhou western village elec.factory Aug,1949.

▼贵阳电厂 1938 年新机房外貌。杨家禄时任该厂工务长。

As a Section chief of eng, craft in front of the new appearance of Guiyang elec,plant, 1938.

▲1980 年杨家禄参加广东省政协活动合影。

In a group photo of Guangdong political Consuitative conference,1980.

▼1949 年 11 月广州西村发电厂拆修第一台 15000 千瓦汽轮机（右为杨家禄）。

Repairing for the Ist 15 kwvsteam turbine of Guangzhou W.V,elec.factory,Nov.1949.(at the right.)

◀1928 年杨家禄在江苏常熟电灯公司办公室。

In the office Changshu elec. light Co.1928.

手迹

Section I-VII, Combination of transistors, diodes, resistors and capacitors and its effect.

(a) The combination of two identical transistors in an electronic circuit, supplemented with a couple of capacitor in parallel with resistor, directly from one transistor's collector terminal, back connecting to the other transistor's base, having trigger or control pulse input through diode also applying on each base, and each collector connected through a resistor to the D.C. voltage supply, is named a binary state, stable multivibrator or flipflop. (see figure) It does like a "teeter-totter"

It is commonly call
information pulse or a mem
and in fact, (an automatic) state exc
operation. It acts also as a pu

For convenince of d
the configuration of fliplop
a retangular frame, lebe
as input and output, FF
and T at middle of botto
S for setting state, at left

Symbol of cell F.F

2266.4948

△作者手稿
Author's original handwriting

▲杨家禄与妻子1929年合影
Mr.J.L. Yang and wife in 1929.

生活的艺术

置身于往来人潮，聆听三世阅历之敦诲，仿佛是久违的天籁和曲，悲欢得失都已尝过。远非古稀、耄耋，超脱期颐，纵然宇宙洪荒中的生命静若止水，又何尝未济沧海。

艺无止境，求索的生命也无止境，生命若止，则凝于生命之上的人的精神，也无止境。激励后来者更无穷尽。

惟望：同福同寿，同心同德。

——为百岁老人家禄先生著作感言

贵州益康制药有限公司董事长　张秋生

1999.12.22

The art of the living

Among the human come-and-go, listening respectfully the edification of the elder's experience from tri-generation to generations, it seems the music of the nature that neglected for a long time. Sadness & happiness, loss & gain all tasted. Though the life in the universe just like the whisht water, it has been to and fro all through the sea.

The endless art and researching life, even if the life ended, the spirits of the person would surpass, and excite for ever.

Just hope sincerely: All being one heart & one mind with the same fortune & longevity.

——for Mr. J. L. Yang's book publishing

Q. Sh. Zhang

12. 22. 1999

作 者 简 介

杨家禄，男，汉族，1897 年（清光绪 24 年）生，江苏省苏州市人。1920 年毕业于南京大学工学院前身——南京第一工业专科学校。毕生从事火电专业工作。历任苏州、常熟、开封、贵阳、武汉、广州等地电厂及电力管理局工程师、总工程师；1972 年从广州氮肥厂总动力师任上退休。曾当选广州市人民代表大会代表，广东省政协委员。八十年代初期，以耄耋之年，曾参加国内和广东省许多学术活动，发表 6 篇电力方面的论文。1984 年以 87 岁高龄还参加了汪道涵在上海主持召开的全国机械工程学会，并宣读自己的论文。九旬以后，来贵阳定居至今。

前　言

我是一个火电工程师，有七个发电厂的工作经验共50年，从1972年退休时起，我考虑右腿骨折缩短2吋，行动不便，决定写书。从此，我收集世界资料并连续订阅美国的《动力工程》，德国的《力能》和俄国的《动力学者》等负有盛名的专业期刊。从1976年至1992年，我自学研究获得不少新知识和新思想。我选用的写作书名具有历史性，广泛但重大，对接班人来说，新世纪可能更有挑战性。我的写作虽简且浅，但我介绍的是问题的核心。我有责任证实过去，我应尽个人的贡献去宣传这些重大成绩。我希望读者从这本书中能获得所需的更高兴趣。

杨家禄

1999年7月26日于中国·贵州·贵阳

Preface

I am a fire electric power engineer, had been worked in seven power plants with fifty years experience. After retired from 1972, I decided to write as my right leg bone broken to contracted two inches being not convenient. Then, I collected world literatures and famous magazines about fire electric power, such as "Power Engineering" of USA, "Energie" of Germany, "энергемик" of Russia with continous issues from 1976 to 1992. Through self-study, I got a lot of knowledge and conception. I choose the "Subject" of writing in historical style, large and broad, but very important for coming candidates as the coming century would be much more challenge to them. Though my introduction is simple and not deep to touch the whole of event, but it's aimed to the centre of problem. I have the duty to witness the past and do one's bit to propagate these achievements. I hope the reader to be able to obtain higher interest from this book for his or her own purpose.

J. L. Yang.
July, 26, 1999
in Guiyang, Guizhou, China

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