

The 1st JHPS International Special Session, Sendai, Japan

Current status and future for improving accident communication with the public in China

On behalf of CSRP

Zhi Zeng

zengzhi@Tsinghua.edu.cn

2019/12/05



清华大学
Tsinghua University



- I. Current status and challenges
- II. Efforts made by China Society of Radiation Protection(CSRP)
- III. Future

I. Current Status and challenges

魚一日無水則不能
生人一日無學亦猶
是也 故魚不可一日無水人不可一日無學

梁文忠師諺

乙亥清明 公履錄



Current status

- Nuclear power industry development:
 - Operation: 47 units,
 - On building: 11 units
 - In planning: 15 units
 - lies in Liaoning, Shandong, Zhejiang, Jiangsu, Fujian, Guangdong, Guangxi and Hainan Provinces.
- With the development of the use of nuclear energy, more and more people have access to nuclear knowledge.

中国大陆核电厂分布图（截至2019年6月13日）





Fear of nuclear

- The fear comes from:
 - Nuclear is **mysterious**-> its military application;
 - Nuclear is **terrible** -> atomic bomb, nuclear incident;
 - Nuclear is **complexity**->decay, fusion, what it mean!
- For public, **NOT** necessary to know it, just escape from it!



Monday, Aug 8, 2016

Home Opinions Business Military World Society Culture Travel Science S

English >>

Jiangsu residents protest nuclear project

(Global Times) 09:35, August 08, 2016



The local government of Lianyungang, East China's Jiangsu Province held an emergency meeting Sunday after thousands of residents staged a protest against a nuclear fuel recycling project being launched in the city, the latest in a series of development projects in China to come into conflict with rising environmental concern.

Thousands of residents in Lianyungang gathered in a local square on Saturday, chanting "no nuclear fuel recycling project in Lianyungang," according to video footage sent to the Global Times by one of the protestors, who asked for anonymity.

A large number of police officers later appeared at the protest site, but no clashes occurred, said the protestor.

The Public Security Bureau in Lianyungang said on its official Sina Weibo account on Friday that any assembly, parade or protest that takes place without permission from the local government is illegal. The bureau also called for residents not to believe in rumors spread on social media and not to participate in any protests.



Investigation of nuclear attitude

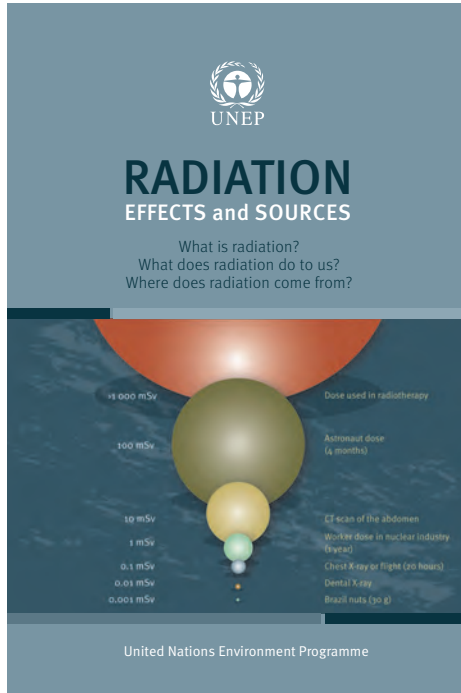
- An investigation on Public awareness and acceptance of nuclear-related projects were done during Nov. 2017 to Apr. 2018 throughout 3367 persons in 31 province by Centre for Publicity and Education, Ministry of Environmental Protection by phone call:
 - some *misunderstanding* and *knowledge blind spot* about nuclear knowledge and the basic situation of nuclear power development.
 - *Most trusted propaganda subjects* is nuclear experts, government and environment organization; low trust subjects is nuclear enterprise, public media
 - *Happy to learn* nuclear knowledge propaganda;
 - More than a half support for development of NPP, just 1/10 opposing. **BUT**, only less than 20% support for build a NPP near their residence.

II. Efforts made by China Society of Radiation Protection(CSRP)





- CSRP host college student competition *Nuclear plus X* each year in different university since 2016. In 2019, students come from 30 university attend this competition.
- In the competition, a team of *nuclear-related major undergraduates plus a non-nuclear major undergraduates* to create popular science artworks, such as video, presentation documents, webpages.
- All the award artworks collected in webpage: <http://www.csrp.org.cn/kphd>



- *Radiation Effects and Sources* issued by the United Nations Environment Programme (UNEP) were translated into Chinese and released to the public by CSRP.



辐射防护

本词条由“科普中国”科学百科词条编写与应用工作项目 审核。

辐射防护是原子能科学技术的一个重要分支，它研究的是人类免受或少受电离辐射危害的一门综合性边缘学科。其基本任务是保护从事放射性工作的人员、公众及其后代的健康与安全，保护环境，促进原子能事业的发展；辐射防护研究的主要内容包括辐射剂量学、辐射防护标准、辐射防护技术、辐射防护评价和辐射防护管理等。

中文名	辐射防护	相关领域	原子能科学技术
外文名	Radiation protection	研究对象	人类免受或少受电离辐射危害
拼音	fu she fang hu	基本任务	护从事放射性工作人员，保护环境

意外发生后，马上有203人立即被送往医院治疗，其中31人死亡，当中更有28人死于过量的辐射。死亡的人大部份是消防队员和救护员，因为他们并不知道野外中含有辐射的危险。为了控制核电辐射尘的扩散，当局立刻派人将135,000人撤离家园，其中约有50,000人是居住在切尔诺贝利附近的普里皮亚特镇居民。卫生单位预测在未来的70年间，受到5-12艾贝克辐射而导致癌症的人，比例将会上升2%。另外，已经有10人因为此次意外而受到辐射，并死于癌症。

到2006年，官方的统计结果是，从事发到目前共有4000多人死亡。但是绿色和平组织，基于白俄罗斯国家科学院的数据研究发现，在过去20年间，切尔诺贝利核事故受害者总计达9万多人，随时可能死亡。因此，绿色和平组织认为，官方统计的结果比切尔诺贝利核泄漏造成的死亡人数少了至少9万人，这个数字是官方统计数字的20倍！对于绿色和平组织的“估计”缺乏理论支持。

- 死亡人数：9.3万人
- 致癌人数：27万人
- 经济损失：180亿卢布

- Baidu wiki, the most popular wiki used by Chinese, is an important sources of nuclear-related knowledge; But some entry related to nuclear is not exact right, sometimes something is wrong in the text.
- A workgroup were setup in 2019 by CSRP to edit and revision the entry related to radiation protection. Provide a right and clear entry is our duty!



- Public communication account of CSRP in WeChat was followed by total 4424 person, and until Nov. 2019 total readings achieved to 59710.



- On Jun. 20-23, 2018, 16th early 21st Century Radiation Protection Forum - radiation, impact and public seminar was held in Xiamen.
- 248 experts and scholars from the nuclear and radiation, public information and communication and related radiation security sectors were invited to conduct various exchanges and sharing in the form of general assembly reports, poster displays and other issues, in response to radiation and its effects, as well as public awareness.



- On Dec. 15, 2018, the Forum on Advanced Nuclear Technology Applications and Nuclear Culture and Public Communication, were successfully held at the Future Science and Technology Experience Museum of the Tsinghua Straits Academy.
- More than 130 people involve many well-known academic scholars, authoritative experts, media and science workers participated the forum to discuss nuclear energy and nuclear safety, as well as concern for nuclear culture and communication with the public.



III. Future



- College Student Competition: *strength the power of* young
- Monographs translation: *strength the power of* knowledge
- Wiki edition: *strength the power of* authority
- Social software media: *strength the power of* society
- Forum on public communication: *strength the power of* experts

The road is under our feet!

Thanks!

