



武汉理工大学
WUHAN UNIVERSITY OF TECHNOLOGY

9th Asia-Pacific Conference on Plasma Physics

My Story: Challenges, Triumphs, and the Future of Women in Plasma Physics

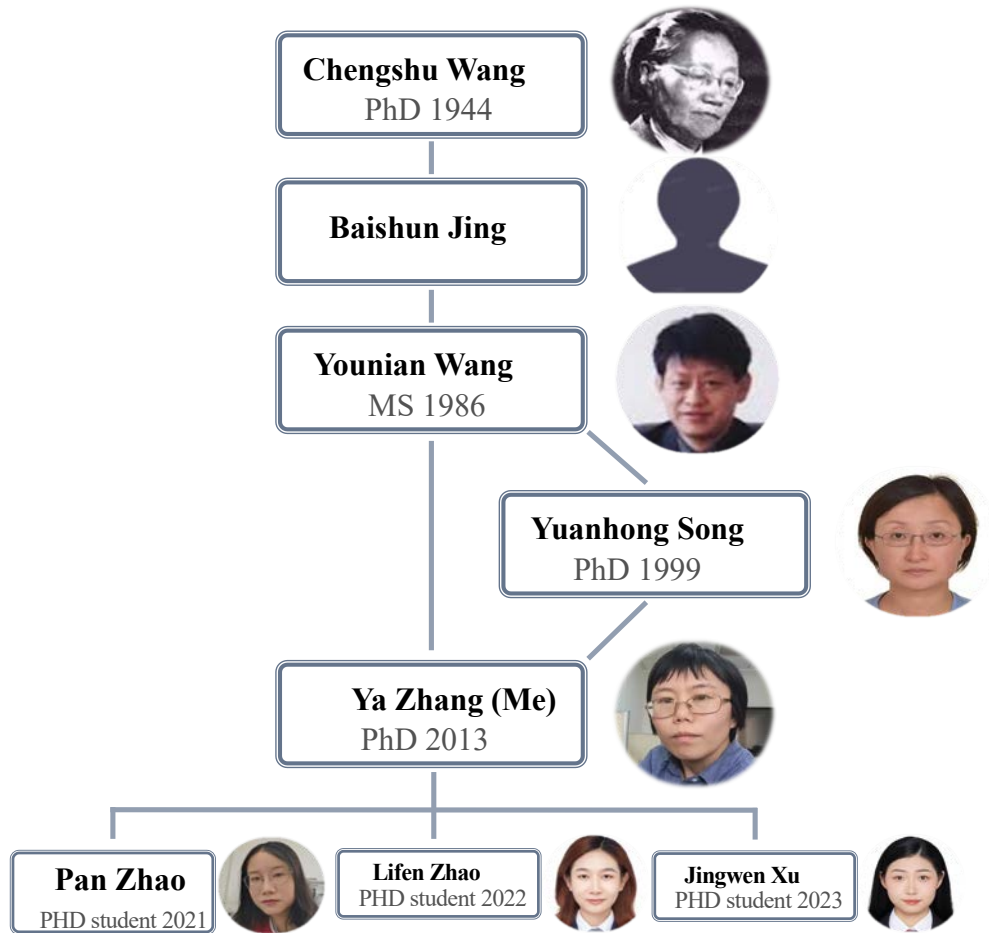
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Sep.22 2025

Academic genealogy



•Academic Great-Grandmother:

- Prof. Wang Chengshu (PhD 1944)
- Pioneering female physicist

•Mentorship Lineage:

- Prof. Jin Baishun (Student of Prof. Wang)
- Prof. Wang Younian (My PhD Advisor)
- Prof. Song Yuanhong (My PhD Co-Advisor)

•Continuing the Legacy:

- Myself (PhD 2013)
- My PhD Students: Pan Zhao, Lifan Zhao, Jingwen Xu, Zhao Wang



Broadening Horizons: A Postdoctoral Journey in Europe



- **Postdoctoral Fellowship (2013 - 2015)**

- University of Antwerp, Belgium
- Advisor: Prof. Annemie Bogaerts

- **Prof. Annemie Bogaerts: A Leader in Plasma Innovation**

- Renowned for pioneering work in plasma chemistry
- Head of the PLASMANT research group.
- Member of the Academia Europaea.

- **My Research Focus:**

- Applied my kinetic modeling to atmospheric pressure plasmas.
- Developed 2D PIC/MCC simulations for DBDs.
- Investigated microdischarge and plasma-catalyst interactions.

- **Impact on My Career:**

- Gained invaluable international research experience.
- **Learned from another inspiring female leader in science.**
- Expanded my research to atmospheric plasma applications.



Building a Career and a Community at Home



- **Joining Wuhan University of Technology (2016)**

- Became a member of the Applied Physics Teaching Team.

- **A Uniquely Supportive Environment:**

- A collaborative team of 20 faculty members, all with PhDs.
- Crucially, about half of my colleagues in the team are women.

- **Female Leadership and Mentorship:**

- Profoundly grateful for the support and guidance from our dean, **Prof. Li Min**, another inspiring female physicist and leader.

- **The Power of Representation:**

- Working in a gender-balanced department with strong female leadership provided a vital sense of community and belonging.
- This environment has been fundamental to my growth as a researcher, educator, and mentor.



Passing the Torch: Mentoring the Next Generation



My Core Mission:

- To build an inclusive and empowering research environment for aspiring physicists.

My PhD Students:

- I am incredibly proud to be advising a talented group of young women who are already making significant contributions:
- **Ms. Pan Zhao** (Enrolled 2021) - *Published research on impedance matching in CF4 plasmas.*
- **Ms. Lifen Zhao** (Enrolled 2022) - *Published research on external circuitry effects in CCPs.*
- **Ms. Jingwen Xu** (Enrolled 2023) - *Published research on nonlinear transmission line analysis.*
- **Ms. Zhao Wang** (Newest member of our group)

Nurturing Future Talent:

- My group also actively includes several female undergraduate students, providing them with early opportunities to engage in hands-on research.



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**Thank you for your
attentions !**